

THE NEW HORTICULTURE



R·M·KELLOGG'S

GREAT CROPS
OF STRAWBERRIES
AND HOW TO GROW THEM

R·M·KELLOGG CO.
Three Rivers Mich.

B. W. PAT. FRANKLIN CO - CHI.

1906

PEDIGREE

The pedigree of a plant must be known in scientific propagation, because it requires several years to breed up and develop it, and the line of ancestry must not be broken by propagating from any weak plant.

A THOROUGHbred PLANT

A thoroughbred plant is one possessing the best characteristics of its variety, the result of growing them continuously under the most favorable environments and accumulating good qualities through annually selecting the desirable variations and discarding weaklings and restricting to prevent pollen and seed exhaustion, thus preserving a perfect balance between vegetative parts and its fruit producing organism.

THE PEDIGREE OF THESE PLANTS

The pedigree of each plant offered in this catalog, unless otherwise stated in the description, shows the ancestry in lineal ascent to have been thoroughbred, as above stated, and they are believed to be perfect in their physical and fruiting organisms in all respects.

COMMON PLANTS

Plants as commonly grown under ordinary conditions, without any systematic selection of bud variations, and for the want of proper restriction, are more or less pollen exhausted and therefore have a strong tendency to make runners rather than strong fruit buds. They do not give uniformity of quality to fruit under any system of tillage that can be used.

THE CAUSE AND EFFECT

We have pointed out the cause of unfruitfulness in plants and have given the effectual remedy as proven by repeated definite experiments, which may be summed up as follows:

The most congenial environments to induce better variations, and continuously selecting those making the greatest improvements, and keeping them under restricted fruitage to develop their fruit producing organism. These methods have met the warmest approval of the highest horticultural experts in the country, and especially that of the International Conference of Plant Breeders. We have been the pioneers in this work, and have the only establishment in the country having perfect conditions for plant breeding.

STOCK FOR PROPAGATION

We make a specialty of furnishing fruit growers with Thoroughbred Plants for their propagating beds, from which they can grow perfect plants which will respond to high culture, with large berries and plenty of them, as well as for general planting.

THE DEMAND

Heretofore the demand has been beyond our ability to supply. Wherever these plants have been seen in fruiting under good cultivation they have created a sensation, and in order to meet the demand we have discontinued the propagation of all other nursery stock and this year have a larger acreage of the best developed plants we have ever grown; but the demand is also rapidly increasing and the indications are that there will be a greater rush for them than in former years. Orders are filled in rotation of receipt and it is to your interest to have your order booked as early as possible which insures your getting the varieties selected. Our customers are always the leaders on the markets.

THE PHOTOGRAPHS

Typical specimens of each variety were photographed in the season of 1905 and engraved to show the size and form of the berries of different varieties, but the camera cannot do them justice, as the beautiful color, delicious flavor and firm texture cannot be put into the picture.

The seeming uniformity of berries of different varieties arises out of continued selection of those approaching most nearly to the ideal type. It is the result of skillful propagation through a series of years.

Copies of this book will be sent free to any four of your friends, with your name and compliments written on each book, so they will know that you sent it. Send in their names. They must be persons interested in berry growing.

VISITORS

Visitors are most cordially welcomed at our grounds at any time. You will be entertained free and conducted through the grounds by ourselves.

COPYRIGHTS

The various editions of this work have been duly copyrighted, covering engravings and all subject matter. All rights are reserved, and nurserymen will be held responsible for infringements in making up their catalogs.



Strawberries and How To Grow Them



WEIGHING AND SCORING PLANTS FOR FURTHER BREEDING.

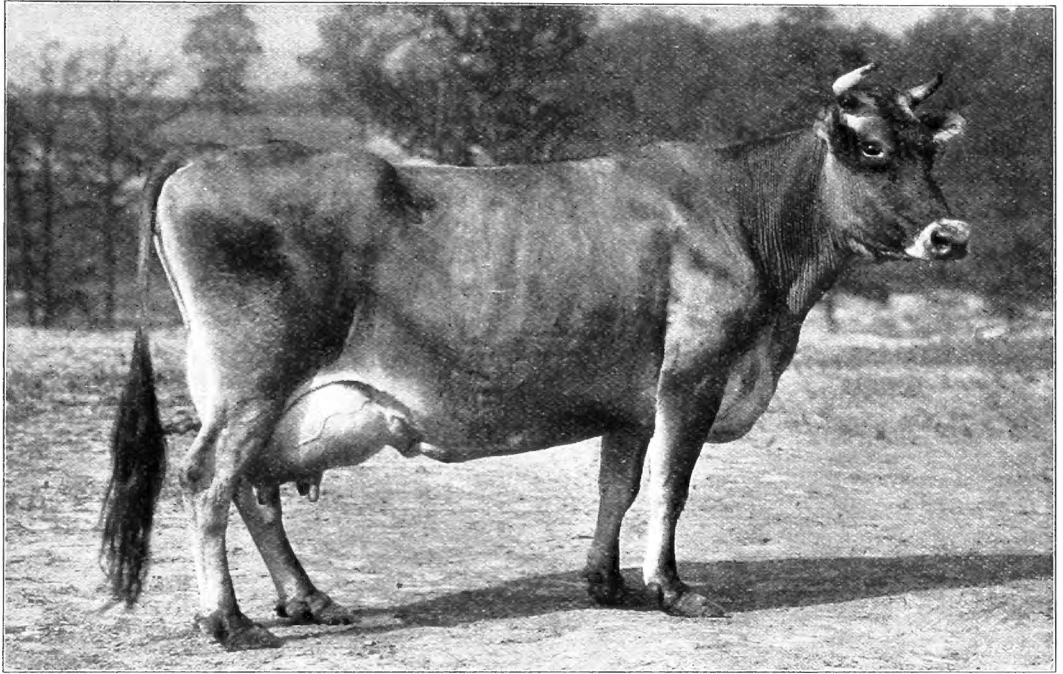
ONE of the most important features of the work of breeding the Kellogg Strain of Strawberry Plants is the selection of individuals from which are to be propagated the thoroughbred plants grown upon this farm. By weighing the fruit as shown in illustration, we determine accurately the mother plants showing largest gains in quantity of fruit and those making the best records in every detail are the ones from which the selections are continued. Each numbered stake marks a mother plant. The foliage is so large it hides the space which separates these hills from others in the same row. Twelve plants were taken up from each of these staked hills and set in Breeding Bed No. 2 on April 5, 1905.

NATURE is instinct with the purpose to preserve life and perpetuate it. The conservation of forces is her first concern. She gives to some plants millions of seed more than are needed for their perpetuation lest, perchance, they might pass out of existence. In her determination that nothing that is shall be lost, nature is not mindful of quality. Nature gave to the world, for instance, the crabapple, sour, hard, coarse grained. She never improved upon it—man gave the world the Jonathan and Grimes' Golden, albeit he developed them from the tough and acid crab. Nature wishes to perpetuate the apple, and the crab grows as many seeds as any other apple; therefore it serves her purpose just as well as would the delicious Jonathan or Grimes' Golden. But man has his purposes. He, too, would perpetuate plant life; but he also is interested in making things that are attractive, pleasant, appetizing. He wants the seeds, but he wants them covered with a delicious, palate-satisfying, eye-delighting, health-giving fruit. And this demand of man,

universal, insistent, has brought into being the breeder, who by systems of selection, restriction and pollination has transformed the unattractive crab into the delicious apple of today infinite in its variety, texture and flavor.

But it is not given to man merely to develop the splendid fruits of today as typified by these popular apples. Upon him is laid the burden of preserving what he has created. For nature, still jealous of her own, will yield not one iota to help man keep what he has won; rather she steadily seeks to destroy what he has brought forth. She wants more seeds with less effort; so she encourages the tendency of the apple to revert to the undesirable crab. This it is that gives reason for being to the modern plant breeder, and without his work, persistent, constant, never-wearying, the world would once more go back to the crabapple.

As with the apple, so with every other fruit and flower and vegetable. All have been developed from comparatively weak and valueless plants into things of sweetness, fragrance or



LORETTA D. AMERICA'S CHAMPION DAIRY COW.

THIS is Loretta D., the beautiful Jersey that easily won the well-earned title, "Champion Cow of the World," during the 120-days' test at the St. Louis Exposition. She gave 5,892 pounds of milk, which made 330 pounds of butter, with a net profit of \$67.74, at the same time consuming less feed than any other cow in the competition. A young son of Loretta D. recently sold for \$1,250 to head one of the best Jersey herds in New York State. The gland system of this wonderful milk producer has remarkable power to convert food into butter fat. This power is inherited from her ancestors, as she comes from one of the best bred and most carefully selected herds in the country. Dairy men are willing to pay fabulous prices for her calves in order to improve their own herds and thus increase the butter-making power at a less cost for feed.

beauty. And quite as wonderful as any other is the transformation wrought in the strawberry from the little wild berry of a few years ago to the splendid fruit that adorns the world's table today. And to the achievements in this direction, during the last quarter of a century, perhaps no other has contributed more important and permanent assistance than the founder of the great strawberry farm that bears his name—the late R. M. Kellogg. Fortunately for the world, the work Mr. Kellogg began and so firmly established is being carried on today with the intelligence, skill and devotion of its founder, and the great farm that stands as a monument to his memory is expanding its area and extending its influence with the passing years.

System, scientific method, lie at the base of all that has been accomplished on the Kellogg farm. Having certain ideals in mind, everything that is done tends to the realization of those ideals. There is no mystery about it; no "wizard" touch may bring desired results. Science and

practical skill, applied to the breeding of plants, produce the same order of results as have given the world wireless telegraphy and the ninety-mile passenger train. Asked to address the American Breeders' association at its annual meeting held at Champaign, Ill., February, 1905, Frank E. Beatty, president and general manager of the Kellogg farm, briefly outlined the methods that obtain there in the following:

"Only a few years ago any man who attempted to improve fruits or grain by selection was called a crank, but today he is looked upon with admiration, and the majority of the people believe that with proper manipulation, improvement in plants is within the power of man the same as improvement in animals; the proof has been furnished by works. The same God who created animals created plants, and both were put here inferior in quality and form.

"Improvement in them, like invention, was left for man to work out, giving man full control over them with power to improve or degrade.

Strawberries and How To Grow Them



AN IDEAL MOTHER PLANT.

HERE is one of our Thoroughbred Pedigreed mother plants in bloom, showing the result of careful selection. These plants have a gland system developed in them that converts their food into fruit buds, which in turn are transformed into large quantities of big red berries. They do the work at a much less expense than possibly could be done by weak and poorly developed plants. This wonderful fruit-producing organism is inherited from the ancestral mother plants, just as Loretta D., the famous cow, inherits her good qualities from carefully bred ancestors. This is why the leading berry growers all over the world are purchasers of the Kellogg strains of plants, and universally proclaim them to be the best and most profitable of any strawberry plants produced. Twenty millions of these plants made our selling record for 1905.

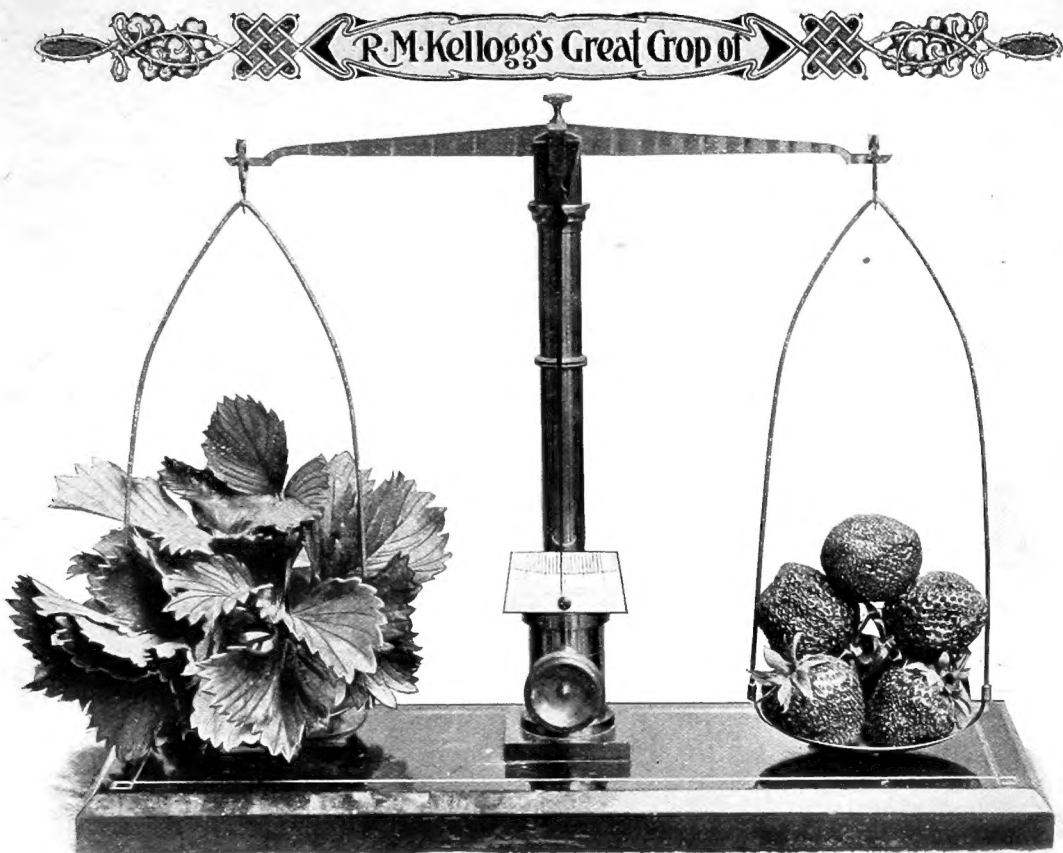
It is plainly seen that we are not following along the lines of the latter; on the contrary, improvements have been made which are beyond the highest ideals of our fathers.

"Undoubtedly God could have made everything perfect instead of placing it here in crude form, but this would have deprived man of great pleasure as well as many honors. While working out improvements and striving for better things our minds are filled with good thoughts and there is no room for evil. Thus in breeding up nature we also are breeding higher ambition into our own lives.

"Improvement in fruit, grain, animals, machinery or anything else depends entirely upon man, and advancement will be made according to his efforts. The plant breeder must be possessed with the patience of an inventor who continues remoulding his model with an aim to reach the perfection mark rather than gold, which

would seem to be the primary object. We seldom hear of an inventor getting rich; those who purchase his invention after it has been perfected are the ones who reap the financial reward. Likewise the plant breeder cannot have gold as his ideal; he must find pleasure in breeding and improving his plants rather than accumulating wealth, and like the inventor, he should not feel satisfied in discontinuing his selections until the perfection mark is attained; and lucky are those who purchase the plants after they have been bred up to such a high standard of excellence. The tillers who apply proper cultural methods to highly bred plants are as much to be envied in a financial way as are those who purchase the perfected invention.

"The starting point in breeding up the strawberry plant is to have a clear picture in mind of the type desired. Then select the plant which is nearest the ideal, and set the offsprings from



STRIKING A BALANCE

BALANCE between fruit and foliage is one of the prime essentials in the fruit-bearing plant. While the foliage should not equal the fruit in weight, of course, yet the correct proportions must be preserved if the plant is to do its best, and this is one of the points carefully cultivated in the Kellogg plants. Any variety producing fruit out of proportion to its foliage is brought to a balance by selecting from mother plants having a tendency to build up a heavier foliage; and those which build up too much foliage at the expense of fruit are treated so as to correct this fault, encouraging an equal division of their energies; thus obtaining a more perfect balance and increased productiveness. A large crop of berries cannot be matured without the assistance of a proportionate amount of foliage; and a large foliage, without a well-developed fruit-producing organism is of no value.

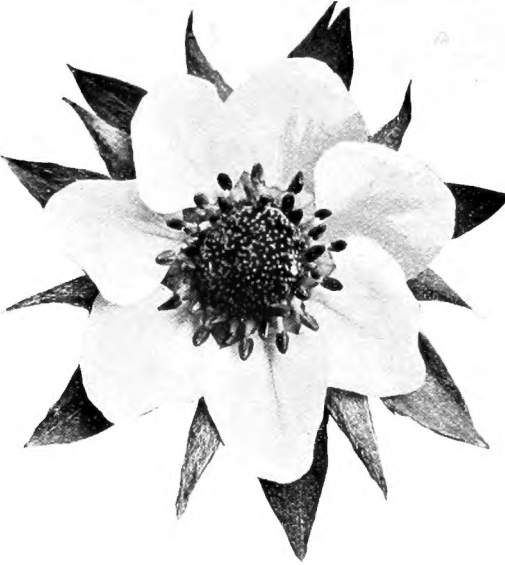
it; from these again select the individual which nearest approaches the type in mind, and so on, generation after generation, until the desired object is attained. In order to make rapid progress, the same ideal must be kept in mind, year by year, lest there be a vacillation and the progress of one year undone by a counter movement the following.

"In working along these lines, we find that almost any feature of a plant may be intensified. Every group of plants is endowed with certain characteristics, and by careful watching and close study of the habits of each particular variety of the strawberry it is possible to break the type and it will depart from its normal behavior; then soon it becomes plastic enough to allow of modification in the manner desired. We now have it practically under our control and develop it to the ideal type in view.

"It is a mistake to have in mind at the same time several objects. We breed for one thing at a time. If a particular variety is deficient in productiveness, but possesses other points of superiority, then prolificacy is the principal object worked for, giving sufficient attention to other features to keep them up to the normal standard. When the one point we are working for has attained our ideal, the next deficiency is taken up for improvement. Breeding along these lines proceeds until all organisms of the plant are brought to the ideal.

"In order to make our method plain, I will use as an illustration two of the standard varieties, Clyde and Gandy. The Clyde when first introduced had a poor balance between fruit and foliage, being deficient in the latter. The first thing to be done here, then, was to increase the foliage by selecting mother plants showing a

Strawberries and How To Grow Them



Bisexual Flower. (B)

This bloom was taken from a bisexual or male variety; it has both male and female organs (stamens and pistils), and will fruit alone without the presence of other varieties. The stamens surround the center cone of pistils and the pollen falls directly on them, fecundation taking effect at once.



Pistillate Flower. (P.)

The above bloom was taken from a pistillate or female variety; they have no male organs to produce pollen, therefore, must have a bisexual or male variety set every third row, so wind and insects will carry pollen to them. Read article on Pollenization, which tells how to set them.

disposition to employ more of its energies in this direction. They are staked, numbered and closely watched through the entire growing season; each one of these staked hills is allowed to make fifteen plants, so that we can determine whether this feature of strong foliage-making is permanently fixed in the mother plant so it will be transmitted into the offspring.

"The following spring twelve plants are taken from each of these staked hills, and set in breeding bed No. 2, giving them the same number as the mother plant from which they were taken; this leaves the mother plant and three of her offsprings to make our fruiting tests. The plant showing greatest gain is the one from which the breeding is continued. Our whole aim with the Clyde is to increase the foliage without deteriorating in fruit and thus get a perfect balance. The fault with Gandy is just opposite to that of the Clyde; it employs its energies to foliage production at the expense of fruit. Our aim is to increase the fruiting power by making selections from the mother plants, which have developed the most and largest crowns, productiveness being the principal point in mind. Thus we work along opposite lines, to those followed in breeding up the Clyde, though having the same aim in view—a proper balance between foliage and fruit. There are sixty-five varieties in our breeding-bed undergoing this process of

selection, each one being treated according to its individual habits. We not only are working to improve the strawberry along these lines, but also seek to get a more perfect and healthy foliage by selecting from mother plants, showing the greatest ability to resist fungus attack. We have discovered that weakness in this direction can be eradicated to a large extent. No matter how susceptible a variety may be to fungi, some plants of this particular variety will be found which resists or is less subject to attack than others, and by continuous breeding from those hardy in this respect such weakness will eventually disappear."

Bases of Success With Strawberries

THE strawberry may well be entitled the fruit universal. Perhaps no other fruit has so wide a habitat. North and south, east and west, it thrives; throughout Europe it is a favorite; from the isles of the Pacific come glowing accounts of its success, and Asia has learned to admire its fine qualities. Clay soil, or black soil, or sandy loam—all are congenial homes for these kindly and generous friends of man. Yet no other fruit requires more thought and care than the ubiquitous strawberry if largest success is to be realized.

The losses to the strawberry growers of this country who use poorly developed plants are



EXPERIMENTAL BED---SIXTY-FIVE VARIETIES UNDER TEST.

SIXTY-FIVE varieties are grown in this bed for experimental purposes, each one being tested under three different systems; namely, single hedge, double hedge and narrow matted rows. Here is where we study the habits of each particular variety and determine the best way to handle them to get the largest possible yield of fancy select berries. Experiments also are made with different classes of manures and nitrate of soda. The best system for growing each variety is given in the description under the photo-engraving of the berry of that variety. For latest discovery read article headed "Growing fancy strawberries for profit."

something enormous; the greater percentage of them do not get anywhere near a perfect stand. This serious trouble originates largely in the low vitality of plants, and this peculiar condition is due to four principal causes:

First, The lack of a breeding bed where ideal mother plants may closely be watched and accurate records kept of their proceedings, making selections annually from those showing greatest advancement in the direction of the ideal type, which the breeder has in mind.

Second, Poor judgment used in preparing soil for the propagating bed, which should be sandy loam filled with humus furnished by some leguminous crop, so that bacteria may be increased proportionately to other necessities, as these wonderful little workers play the same important part in plant life as do the corpuscles in the human system. After incorporating with this a well balanced plant food in some form, we have made soil conditions capable of developing a plant strong in muscle, bone and tissue, providing the cultural methods are in the hands of an operator who understands his business, so as to

make such changes as atmospheric or soil conditions demand.

Third, Severe cold spells, alternate freezing and thawing, causing expansion and contraction, straining or breaking the roots from the crown or body of plants. This should be prevented by a good covering placed over the propagating and breeding bed in the early winter before heavy freezing begins.

Fourth, Carelessness in taking plants up and not knowing how to pack them to meet the conditions to which they may be subjected in transit; the distance and latitude to which they are going should be considered, then the dampness of moss and method of packing each particular order can be intelligently adjusted.

Strawberry plants that have been stunted from any cause will produce offspring of the same character and they will never develop into heavy fruiters, any more than a stunted calf from stunted ancestors can develop into a profitable dairy cow or beef animal. The sooner berry growers begin making selections from ideal mother plants, which can be traced back through

Strawberries and How To Grow Them



PRIDE OF MICHIGAN IN BLOOM.

JUST look at this engraving and imagine every bloom a big red berry; that is just what you will see every year. No blank bloom on the Pride of Michigan; every one develops into a big bright red and perfect specimen that fills every requirement of an ideal fancy berry. For productiveness, size, quality and beauty, it is certainly a record breaker. Read description on page 59.

a long line of ancestors, as the successful live stock breeders are doing, the sooner will this weakened condition in plants be eradicated. Then, and not until then, they will be headed in the right direction for big paying crops.

But while strongly developed plants which have been selected from heavy fruiterers are the principal feature of successful strawberry growing, even these do not insure a full degree of success without combining other essential features. That is, a thoroughbred plant cannot be expected to do unusually heavy work, even though it come from the very cream of ancestors, unless the grower is willing to do his part in assisting it. Neither can a weak, stunted plant prove profitable, no matter how intensive the cultural methods are, because it has not the vitality to build up fruit buds and its offspring become further weakened until the fruit-producing organism is entirely exhausted; then, the grower says it is run out which, of course, is true. Now, if a plant will run out by careless propagation, why is it not just as easy to run "them in" by taking the opposite course and breeding from the strongest instead of the weakest?

The reader may have a better understanding of a thoroughbred plant if it be compared with a well-bred horse. An expert horseman would not think of training a horse for the track unless the animal had a pedigree showing possibilities of great speed. And though breeding is the principal element, yet the owner would not dare depend on this alone. He would insist upon having a well-trained driver who understood what class of feed this horse required; also how to handle it on the track, that it might have every advantage possible over its competitors for the big prize. The horse expert's first consideration, then, is a well-developed, speedy animal. The next is proper feeding and a driver who knows how to get the speed out of the horse. We think this will suggest to the reader that high breeding, without intelligent feeding and driving, is not to be counted on in plants any more than it is in animals.

Now, we are ready to go on and tell how to hitch up and drive well-bred strawberry plants so they may have a chance to display their breeding. In the first place, be sure that the plants you set really are thoroughbreds and that



A MAIL CARRIER'S STRAWBERRY BED.

HERE we show a beautiful and cozy home with a well kept strawberry bed in the rear, owned by Mr. Webb Walters, one of Three Rivers' mail carriers. When you order thoroughbred plants or write to the R. M. Kellogg Co., this is the carrier who brings your letter to our office. During the busy season when orders are pouring in at a rapid rate, we receive about 2,000 letters and postal cards per day; this makes a big load, but no matter how heavy the mail is, Mr. Walters always carries a big smile, which grows larger as the mail increases. This is his every day face you see in the picture, but why should he not be happy with a loving wife, two sweet baby girls and such a cozy home to keep them in? His bed of thoroughbred strawberry plants, plenty of fresh vegetables and a coop full of chickens are grown on the back part of one city lot. Now can you offer any excuse for not having a nice strawberry bed?

they have been selected from a long line of ideal mother plants, which can be traced back far enough to insure that their high qualities have been permanently fixed in them and like the horseman, see to it that they are well cared for, neglecting nothing that will contribute to their success.

The Pedigree of a Plant

PEDIGREE is a detailed description of ancestry in a lineal descent. Of course, everything which has life has a pedigree, but the word is used in a technical sense. When we speak of a "pedigree" horse or a "pedigree" cow we do not mean a common cow, but one skillfully bred. Not only pure in blood, but grown in such a way as to develop the best qualities in the individual.

The term "pedigree strawberry" is especially applicable because it takes many years to

breed it up by high tillage, selection and restriction.

Suppose you take a variety which has been introduced and cultivated ten years, the berry grower following the plan of taking tip plants in the path or alley poorly developed and often from an old bed. This would destroy the harmony or balance between the vegetable, and fruit producing organism of the plants, some too strong in seed organism and weak in foliage, and vice versa.

You would not call these plants "pedigree" plants, because they have not been developed by skillful culture, selection and restriction. Just like the barn-yard animals bred any and every way, they would be properly designated as common stock because of indifferent ability to produce milk or beef.

A pedigree plant is one known to have received every possible attention in the way of food and culture, restricted in its fruitage to

Strawberries and How To Grow Them



BREAKING UP THE SOIL.

THIS piece of ground was seeded to clover in June, 1903, which made a rank growth and was turned under in September, 1904; after which a dressing of manure was applied and rye sown to furnish a winter covering. The above picture shows our teams turning the rye and manure under in April, 1905. This furnishes an abundance of humus and plant food to keep up a continuous and vigorous growth in plants.

strengthen its seed and fruit producing organs and these qualities were acquired by the constant selection of those showing the greatest degree of improvement through a long series of years.

It is simply a recognition of the individuality of a plant and makes ancestry of value because characteristics are more surely transmitted through runners and buds than by seeds.

The most significant difference between a commonly grown and a pedigree plant is that with the former you get no adequate return for your labor, while the latter pays richly.

The great railroad magnate, C. P. Huntington, once said to a group of young men, "Be on the lookout for a proposition that pays." It is applicable to strawberry growing. A large share of strawberry growers are entertaining a proposition that does not pay. They are using poor plants that cannot be made to pay by any system of manuring or tillage.

It is much like the dairy. Years ago a farmer could not tell how much cream and butter a cow made. Some cows paid and some were kept at a loss.

The Babcock test came in. This is a machine that tells at a glance how much butter

there is in a quart of milk, and so the dairyman began killing off the poor cows and breeding from those testing highest, and now he is getting rich because every cow is a good one and getting better every year.

It is the same thing in strawberry growing. Accepting "a proposition that pays," gives you pleasure, makes life worth living, creates a standing in the community where you live, and a good bank account—that's what pedigree plants do. "It is a paying proposition."

Soil Preparation

WE have shown that from naturally strong plants it is possible greatly to increase the yield and quality of the strawberry. We also have made it clear that the physical condition of the soil and good soil management are essential to secure desired results. The maximum productive capacity is reached when the soil is able to hold the greatest amount of moisture, charged with a large amount of plant food. Stable manure, judiciously applied, comes the nearest to filling these requirements of anything we have tried. If some leguminous crop could be grown in advance of strawberries, the result would be better still; when this cannot be done,



MAKING IDEAL SOIL CONDITIONS FOR STRAWBERRY PLANTS.

THE head tool pulled by four horses is a double action, cutaway disc, which cuts and mixes the soil. Following this is an Acme harrow for pulverizing and mixing; then comes a leveller and a large steel roller following in the rear. These tools put the soil in a most perfect condition, which aids wonderfully in growing a healthy crop.

break the ground in the fall, then spread manure on top and work it into the soil with disc or harrow; drill five pecks of rye to each acre; and if the weather is favorable, it will make a good growth before winter. This will take up the plant food and hold it in reserve for the strawberry plants which are to be set the following spring. It also will act as a mulch during the winter and prevent the soil from puddling. Turn the rye under in the early spring. Providing circumstances will not permit of fall preparation, the next best thing to do is to spread the manure on the ground in the winter and early spring and break it up as soon as conditions will permit. The winter rains will leach the juices from the manure and it will be absorbed by the soil grains. Before setting plants the vegetable part of this manure should be thoroughly mixed into the soil to make it spongy for the purpose of holding moisture.

How to Handle Manure

MANURE left in heaps and exposed for a considerable time to the air, when not frozen, loses one-third of the nitrogen, one-fifth of the potassium and one seventh of the phosphorus. This has been proved by exper-

ments made by the department of agriculture. These facts furnish a powerful argument in favor of protecting it from sun and rain. Or, better still, haul and spread it as soon as made. Where this latter cannot be done we recommend a cheap shed where the manure may be thrown, and by keeping it tramped firm will lessen the danger of burning. A layer of manure and then a layer of dust or soil is an ideal method.

Land plaster also is good to keep ammonia from escaping. To mix manure from the cattle stable with that which comes from the horse stalls is a good plan, providing it is kept well packed to exclude air.

Commercial Fertilizer.

A TON of fresh barn-yard manure of good average quality contains twelve and three-fourths pounds of nitrogen, six and one-fourth pounds of phosphorus and thirteen and one-half pounds of potassium. Its effect is to make natural plant food available, a large part of which otherwise would remain locked up. During this process nitrogen seems to become available in excess both of potassium and phosphorus, and here is where commercial fertilizer comes in good play. Applying 400

Strawberries and How To Grow Them



SETTING STRAWBERRY PLANTS.

BE careful men, take plenty of time and set them right. That is what the foreman keeps telling the men as he passes back and forth inspecting their work. Each one has a dibble and a metal basket full of plants. The man at the tub submerges them in strong, tobacco tea to protect us and our customers against any root aphids. Every plant is dipped before it is set. We take no chances on anything. An ounce of prevention is worth a pound of cure. This is why we can guarantee our Thoroughbred plants to be absolutely healthy. Take one pound of tobacco stems and boil in five gallons of water. Use when cold.

pounds of bone meal and 200 pounds of muriate of potash in the spring, working it into the soil before plants are set, will balance things up and make more berries, besides adding color and firmness. Commercial fertilizer, without the use of manure or some leguminous crop plowed under, never gives as good results as it does with it. It is a fact long ago observed, that increasing the organic matter in the soil increases also its water-holding power. It requires a large percentage of moisture to convert plant food into a state of solution. Then bacteria, like the yeast germs, can manufacture the gases and soluble foods, which rootlets quickly absorb. The rootlets of plants do not have mouths, but are more like the inside walls of the stomach; they feed by absorption and they can use only such foods as are in the form of liquids or gases. We mention this so the reader will see the necessity of humus in connection with fertilizers, also that he will apply the bone meal and potash before plants are set, so it will decompose and be taken up by the soil grains, where it will be prepared into available form through the natural course.

Bacteria Makes Plant Food Available

BACTERIA are minute organisms that perform important functions in plant and other forms of life, and require certain conditions for their best growth. They thrive best at a temperature of between 40 and 95 degrees. The presence of water, air and an abundance of decaying organic matter are necessities, and it is the business of the berry growers to see that all of these requirements are properly met. Keep the soil well aerated by frequent cultivations and hoeings; this will provide proper soil mulches and keep the water content normal. Bacteria also cause the decay of barn-yard manure and all manurial plants plowed under to enrich the soil. With the aid of heat and moisture they convert the decayed organic matter into plant food, and if the amount of air be limited, one part becomes immediately available, while the other part goes into humus. But if the soil particles are large and the air spaces large, then air will be admitted too freely, and the bacteria will render all the constituents of the manure at once soluble, and decomposition will not stop at the point where



AN OBJECT LESSON IN PRUNING.

THIS illustration shows our method of pruning. All three of the figures shown are photographs of the same plant at different stages of its development. On the left is shown the plant as taken from our breeding bed April 27, 1905. Notice the roots; how they start from the crown. The illustration on the right is a photograph of the same plant taken a few minutes later and after it had been pruned ready for setting. It was then taken to our experimental plot and reset and allowed to grow until June 26. The central illustration shows the plant as photographed on that day, fifty-nine days after resetting. It will be seen that the roots sent out many laterals or feeders where the cut was made, as shown by the dotted lines; yet less than one-third of the new root system would have compared in size with the foliage. During that fifty-nine-day period the plant built up twenty leaf stems, four crowns and a large, well-developed body. This is due to the fact that a Thoroughbred plant is strong and vigorous, its roots are fully ripened and thoroughly calloused, and when properly pruned, set out and cultivated, is bound to be successful.

humus is made. This soluble food becomes a part of the moisture or water-film that surrounds the soil grains where it is absorbed by the roots; if the supply of soluble food be in excess of the plant's demand it will leach away, causing waste.

To prevent this over-supply requires especial treatment of the particular soil you are cultivating. Inasmuch as sandy and clay soils cannot be handled alike, we give cultural methods for each separately.

Strawberries and How To Grow Them



FINDS PROFIT IN THOROUGHbred PLANTS.

IN sending the photograph as reproduced above of a part of his 1905 patch of Kellogg Thoroughbred plants, J. A. Russell of Elkader, Iowa, writes as follows: "I am pleased to say that I have profited by studying your plant system as well as from growing your Thoroughbred plants." Just what our other customers say.

Treatment of Clay Soils

CLAY soil should be prepared and cultivated in a reverse manner from that of sandy soils, as it has a tendency to become so compact that it will exclude air and thus invite the presence of undesirable bacteria, bacteria that will produce from the decaying organic matter either actually poisonous, or at best, compounds useless to plants. Clay soils and clay loams should be kept constantly stirred and aired, so the process of decay will be normal. Cultivation should be somewhat deeper than on sandy soils; four inches is about right, providing the cultivator tooth next to the plant is one and one-half inches shorter than the other teeth; this will prevent it from cutting roots.

If the soil is quite heavy, about every two weeks go through the middle with a five-tooth cultivator and dig down deep; this will open up the soil and you will note a great change in the growth of plants. We are confident that big results do not depend so much upon a certain texture of soil as they do on the grower's knowing just how to handle the different kinds of soil.

Do not roll clay soil or pack it any more than is necessary to break the clods; have cultivators arranged so the top surface will be left a little

rough; this will prevent the soil grains from running together or puddling during a heavy rain. Never work it either before or after plants are set, until it will crumble easily. By observing these rules you will avoid the danger of heavy clay or gummy soil baking, and growing berries in them will be entirely satisfactory.

A loose black soil should be handled the same as a sandy soil, while a stiff black soil will respond to the same treatment as the ordinary clay soil.

How to Handle Sandy Soil.

IN preparing sandy soils where the particles are large, compact it thoroughly by rolling before setting plants; this will firm it in such a manner as to close up the larger air spaces. Roots require air as well as water successfully to perform their functions, but nature has provided for air supply by pulling the water up against the soil grains and holding it there by a force called adhesion. While this water is in contact with the soil grains it dissolves out of these particles a small amount of plant food which is held in solution ready for the roots of some plant to absorb and utilize. The water in a normal, fertile soil will not fill the vacant



239 QUARTS FROM THIS LITTLE PATCH

JAMES CLEMMENS of Kansasville, Wis., sends us this photograph and says: "This little corner of our garden gave us 239 quarts of strawberries—the best we ever had." That was because he had Thoroughbreds and cultivated them according to the Kellogg system.

spaces between the soil grains, but exist as a continuous film, covering the surface of the soil particles, leaving all the space for air that is necessary. Pressing the soil firmly and keeping it so by shallow cultivation will lessen the danger of too much air. The cultivator should be allowed to go about three inches deep.

Marking Out Rows

ONE of the very best marking devices is composed of three runners attached to boards; they are inexpensive and very easily made. Get a 2x4 scantling and cut three pieces, two feet long, sawing diagonally; this will leave each piece sled-runner fashion; then they will slide along on top of the soil without dragging dirt in front of them. Now take a board one inch thick by four inches wide; the length will depend on the width of your rows, which should be governed by the system followed. When berries are to be grown in hills, single or double hedge system, the rows should be three feet apart, while narrow matted rows will require three and one-half feet. If the rows are to be three feet wide, then the length of the board will be just six feet, one runner being



spiked at each end and one directly in the center. Next, put in a pair of shafts—and the job is done.

✕

Fight off the following habit and get the leading spirit; the fellow in front always gets the bouquets

Strawberries and How To Grow Them



A HAT FULL OF GANDYS AND PRIDES OF MICHIGAN.

WE admit that this is a careless way to use a \$2.00 straw hat, but we would rather ruin the hat than come home without the berries. This picture will make everybody hungry, and that is just what it is intended to do.

How to Set Plants.

THE picture herewith shows our foreman in proper position for setting plants. The dibble, which is the best tool on earth for this purpose, is in the right hand; the plant is held at the crown by the forefinger and thumb of left hand; the body is principally supported by the right knee, while the left arm rests on left knee. You will notice that the top of the dibble leans a little toward him; it is now ready to be forced into the soil at a depth of about six inches, then he presses it from him until a wedge shaped opening is made, holding the dibble against the opposite side to prevent the dirt from falling back into the opening. Now the plant is given a quick motion so as to spread the roots and throw them straight down into the opening, holding the plant so the crown will come on a level with the surface; he now withdraws the dibble and plunges it down two inches from the opening and forces the soil back, hard, against the plant, at the same time pressing the dirt around the crown with the left

hand. While the next opening is being made with the right hand the left hand is getting an-



R-M Kellogg's Great Crop of



SPRAY MACHINE MAKING ITS EIGHTH TOUR OVER THE FIELD.

THIS picture shows our insurance policy against all fungi and insects. In about ten days after the plants are set we start the spray machine, using Bordeaux mixture and Paris green. The machine has a gearing on the axle, which operates the pump, thus throwing a perfect mist all over the plants. It requires just three days to spray the entire one hundred acres, which is repeated every ten days. Growers who set our Thoroughbred plants are insured against any insects or parasitic fungi being carried to their farm. This one feature alone speaks volumes in favor of our Thoroughbred pedigree plants.

other plant ready to set; in this way there is no lost motion and the work is done so quickly that one man easily can set 2,000 plants a day, doing good work.

Spraying.

EVERY crop has foes of some kind; often they gather the lion's share of the harvest. But the strawberry is attacked by fewer of them than any other fruit, which is certainly a favorable feature and encouraging to their general cultivation. The difficulty of saving a crop of strawberries from ravages of noxious insects and parasitic fungi is small compared to tree fruits; and when some enemy does attack them, it readily is controlled because strawberry plants are easy of access and spraying can be thoroughly done. Fighting insects and fungi is like fighting anything else: they are the more easily whipped if we start war on them before they get too big for us. The old adage, "an ounce of prevention is worth a pound of cure", can well be applied here. For fungous growths, such as mildew, blight, and rust, start spraying

at first sight using Bordeaux mixture which is made as follows:

4 lbs. lime slaked in 4 gals. hot water.

4 lbs. blue vitriol dissolved in 4 gals. water.

To which add sufficient water to make one barrel of forty gallons.

For any leaf-eating insect use Paris green which should be mixed as follows:

Take 1 pound unslaked lime; put over this 7 ounces of Paris green and pour over this 2 gallons of hot water. To which add water to make fifty gallons.

Should both insects and fungi be present on the vines, the Paris green may be added to the Bordeaux mixture and applied at one spraying.

Proper Pollination.

TAKE the best plants that ever were grown, set them in ideal soil and give the best cultural methods known to the scientific world, and unless there was proper mating of varieties at setting time the outcome will be disappointing. It simply is impossible for the bisexual to be of any benefit to the pistillate unless they both bloom at the same time. As a rule

Strawberries and How To Grow Them



BELIEVES IN THOROUGHbred PEDIGREE PLANTS.

HERE is a picture of L. R. Walker's "patch" of Kellogg's Thoroughbred Pedigree strawberry plants, grown on newly cleared land at Alderson, W. Va., and in the following letter he gives an account of his experience with these plants and his view of their value as compared with plants received from others: "R. M. Kellogg Co., Three Rivers, Mich. I desire to say that I can endorse every claim you make for your Thoroughbred Pedigree strawberry plants, for I have given them a severe test. Warfield, Lovett, Senator Dunlap and Excelsior are the varieties I have tried. I have grown the Kellogg berries right along with others of the same varieties received from plant growers. I find in the first place that the Thoroughbred plants made several new crowns before sending out runners, while the plants from other nurseries send out runners before they are strong enough to do so; and I also find when runners are clipped off another crown shows soon after on the Kellogg plants, while on others you may look for more runners only, and generally they are very weak. I have made observations all along through the plant-growing season, and can tell the Thoroughbred plants by the foliage. Even strangers who visit my garden make remarks concerning them as if they were of another variety. I answer, "Not another variety, but different in their breeding." Then I try to explain to them just what that means. This is not all: the pickers tell the difference in their wages, as I do, in the amount received for berries of the same varieties and grown on the same sized piece of ground, but which came from other nurseries. I will say that one-third more berries and of better quality are gathered from the Kellogg Thoroughbred plants than are picked from other plants as usually sold by plant growers. I will also say that we have a new business here in berry raising and have many visitors. I take pride in showing those who are interested the difference in plants, and some of them say they will want your book on "Great Crops of Strawberries and How to Grow Them." Be assured that I will recommend to all who intend to raise strawberries the investment of a few dollars in Thoroughbred plants."—Yours for business, L. R. Walker, Alderson, W. Va., July 24, 1905.

the pistillates are more prolific than the bisexuals, and generally their flowering period extends through a long season, which makes it quite difficult to get a male of the same season as the female that will start blooming with it and continue right through. For this reason best results will be obtained by using two males of different seasons for each female; for instance, when growing an early pistillate, set one row of extra early bisexual, then three rows of the pistillate and the next rows of some mid-season bisexual. This

overcomes the possibility of shortening the crop from improper mating. It sometimes happens that all three of these will ripen a large percentage of their berries at the same time, and to avoid mixing them when picking, have the pickers go over one variety at a time. In this way each kind is boxed and shipped entirely separate from the other. This requires a trifle more precaution during fruiting time, but it pays big in the end. Experience has taught us that we cannot always depend upon any variety matur-



THE KELLOGG THOROUGHBREDS IN CANADA.

IT was a wet season about Cobourg, Ontario, but W. H. Rogers of that place writes us under date of July 18, 1905, that he had sold 1,750 boxes to date, with berries still on the vines. He sold direct to consumers at 15 cents a quart for firsts and 12 1-2 cents for seconds, and had the market all to himself. The picture of his plantation suggests that Mr. Rogers knows how to handle our plants to bring results.

ing in its regular season, as certain changes in atmospheric conditions may advance the buds in one, while the same conditions might retard the buds in the opposite sex. Immediately after the pistillate or female flower opens, the stigma is most receptive, and if the male, or bisexual, flower opens at the same time and is strong in potency of pollen, the ovules will all be fertilized, fecundation taking place at once; this insures a perfectly developed berry.

Inasmuch as this very important feature contributes so largely to the success of fancy berry growing, we hope the reader will follow our suggestion and use two varieties of bisexuals to each pistillate, thereby lessening the possibility of any blank bloom. Every pistillate on our farms is set in this way, and we are positive that it pays. We are not advancing anything in this book which is in the experimental stage; nothing but approved facts.

Our Mr. Beatty is one of the most extensive strawberry experimenters in the world, and in actual work as a commercial strawberry grower never failed to grow a big crop of fancy strawberries in ten years. This method of congenial mating is his discovery. There is but very little,

if any, difference between plant and animal life in this respect, and we all know that if any results are expected from animals, they must be mated at the proper time, and what is common sense in animal breeding also is common sense in plant breeding. In fact, the more clearly we comprehend the correspondence between plant life and animal life, the easier it will be for us to administer to their wants in a manner congenial to their respective natures.

Pollen Exhaustion

ONE of the most critical periods in plant life is during the blooming season, at which time the grower has a chance either to strengthen or weaken the vitality in plants, and which ever course he pursues, the effect will be the same on his bank account as it is on the plants. It is a serious error to try to force plants of any kind to produce pollen and develop seeds before the roots are established in the soil; and when this is demanded of them their vital forces are consumed during the process and the result is actually fatal or they are left in an exceedingly weakened condition. It is an easy matter to relieve plants of the great strain

Strawberries and How To Grow Them



STRAWBERRIES WITH POULTRY DOUBLE PROFITS.

THERE is no other industry the poultryman can add to his business with more pleasure and profit than strawberry growing. No other concern has done more to encourage this combination than the Kellogg company. From many of our customers come letters telling of their success with this combination, and the above photographs of scenes on the place of F. B. Magill, Piqua, Ohio, together with the following cordial note from that gentleman, indicate something of the results which follow their proper management. Mr. Magill says: "We have found strawberry growing very profitable in connection with poultry raising. And we have given the Kellogg strawberry plants a thorough test and cannot say too much in their praise." The strawberry plant shown is one of our Thoroughbreds in full fruit.

of pollination which may be prevented by cutting the fruit stems or pinching them off with thumb nail before the buds open. This reserves their energies for building up heavy root, foliage and crown systems, which form the solid and sure foundation upon which to build a big crop of berries.

Cultivation

SINCE both the soil moisture and the plant food materials dissolved in it are so essential to plant growth, it is of fundamental importance to cultivate immediately after the plants are set. This will form a dust mulch and prevent the moisture which has been brought up by capillary attraction from coming in contact with the air. If cultivation is neglected and the soil left without a dust mulch, the water will work up to the top, bringing with it the mineral matter which the water films have dissolved from the soil grains. Upon reaching the surface they separate. Here the water is evaporated into the air, leaving its content of plant food to be washed away by heavy, dashing rains. In order to save

soil fertility, we must cultivate and check this moisture on its way to the surface, thus preventing losses by wind and sun.

When to Cultivate

JUST when to cultivate will depend a great deal upon soil conditions. We have already said that the cultivators should follow directly after the plant setters, and this cultivation should be repeated at least every eight or ten days and always as soon after a rain as the soil will permit, but never before it will crumble. A crust never should be allowed to form, even if you have to work a little over-time. In a case of this kind moisture escapes very rapidly, and each rain should be treated as though it were the last. In fact, we never can tell when the next rain will come, and immediate attention may save enough water to carry the plants through a long drouth. We find that soil will hold moisture longer if we cultivate after a rain and follow this again in about four or five days; then every eight or ten days will do. This disturbs the old mulch and replaces it with a



PEDIGREE PEACH TREES PRODUCE PROFITS.

ROLAND MORRILL, the famous peach grower, whose orchards in Michigan and Texas excite the admiration of the world, is a believer in Pedigree as an element in successful plant breeding and improvement. The illustration above is from a photograph of his orchard at Benton, Harbor, Mich. On the back of the photograph Mr. Morrill wrote as follows: "The trees in this orchard were propagated by myself on the 'pedigree' plan. The four acres, of which this picture shows a part, yielded \$6,400 in 1899, and in the consecutive years of 1898-99-1900, produced \$11,850, or more than \$2,960 an acre. Has produced a fair crop every year since it was two years old and is still bearing good crops, one of the best trees producing this year fifteen bushels. This view was taken at second picking, crop about one-third gone." It takes Thoroughbred Pedigree peach trees to make a record like that—just as it does in the case of strawberries.

fresh one. Continued cultivation through a drouth will check evaporation more than one-half. After the dust mulch lies eight or ten days undisturbed it becomes settled, letting moisture work up so near the top that there is danger of waste by evaporation, the capillary power becoming stronger as the water in the mulch increases. The importance of frequent cultivations during a drouth cannot be over-estimated.

The Last Cultivation

THE last cultivation will depend somewhat upon the varieties and the season. All those kinds which make a thin foliage and produce a heavy crop of berries should be cultivated later than the heavy foliage makers; this will keep the vegetative parts growing, thus getting a more perfectly balanced plant. All those which are shy bearers may be forced into greater productivity by discontinuing the cultivation early. Plants are very industrious if their growth

is checked in foliage; they immediately devote their energies to the making of fruit.

Study the habit of growth of each particular variety and act accordingly.

No matter what variety or what grade of soil, after the last cultivation and before freezing starts a narrow furrow should be made directly in the center between the rows. This furrow should be about four or five inches deep, and its purpose is to provide drainage for the surplus water from heavy rains or melting snows in winter; preventing the settling of water around the crowns of plants which, freezing into solid ice, would shut off their air supply and result in certain death by smothering.

Discouraging Plant Enemies

THERE is, perhaps, no other single thing the strawberry grower may do to protect himself against the attacks of insect and fungous pests which will be so effective as to secure and set out plants that have been thor-

Strawberries and How To Grow Them



THOROUGHBREDS IN THE SUNNY SOUTH.

WHO wouldn't be proud of such possessions as these? We don't have to say there is more than one kind of Thoroughbreds in that scene—the picture tells the story in a most eloquent way. D. B. Lacey of Maylene, Ala., is the proud father of that lovely quintet, and also is proud to be the grower of the berries shown. The photograph was taken May 4, 1905. Mr. Lacey writes us May 14: "This plot of berries is 74x52 feet, and was set in April, 1904, under very unfavorable conditions, as it was exceedingly dry that month. I have gathered over 300 quarts of strawberries and sold some of them at 12½, 15 and 20 cents per quart, and there are many more to gather yet. Everybody says they are the finest they ever saw."

oroughly and scientifically sprayed in the propagating bed. If this has been done at the nursery there is very little, if any, danger of larvae, eggs or spores being carried on plants to your farm. Clean culture is the next best thing. If weeds and grass are allowed to grow they afford a prolific breeding place for insect pests. Clean culture also enables one to get at these enemies in a more successful manner for applying insecticides or other methods of destruction, should these enemies put in an appearance.

It also is a safe rule to mow off the vines after the fruiting season and burn over the entire field. This will make it so hot for the pests that they will have to give up and go to the place where strawberries do not grow. Crop rotation will prevent the multiplication of many insect pests by starving them out. Rotation is found to be quite effectual in getting rid of the corn-root worm; these insects deposit their eggs in the corn field in autumn and hatch into worms the following spring; but if there is no corn for them to feed upon the worms perish. The

corn-root louse also is checked in this way. Fall plowing also gives very good results, as all root-eating insects are thus exposed, in one stage or another, to the attack of birds or other lovers of their carcasses. They also are subjected to thawing and freezing.

It is a well-established fact that plants are better able to resist the attacks of insects or fungi when they are in a thrifty, growing condition than when they are weak in vitality; therefore, we would recommend such fertilization as will bring about the healthiest growth. This is another point in favor of clean culture, as it keeps plants in a continuous growth and does not allow them to lag or become weakened.

A great improvement may be made by selecting from mother plants which are most resistant to fungus attack. Those with strong leaf tissues may always be found in any variety.

This work receives as much thought and attention in our breeding beds as any feature along the line of plant selection.

R. M. Kellogg's Great Crop of



R. M. KELLOGG CO.'S OFFICE FORCE.

HERE is a part of our force of clerks and stenographers who assist us in taking care of the correspondence which the Thoroughbred strawberry plants bring to us in an increasing flood as the years go by. Answering questions in a way that will assist our friends better to succeed in growing big crops of fancy berries is a great pleasure. We can give you still better service, however, if you will, when sending questions, put them on a separate sheet from that on which the letter is written, and numbering them. And don't fail to write your name and address plainly. If you don't hear from us when you write, you may be sure the fault is not at this end.

Removing Runners

AFTER the plants have been taken safely through the blooming season, the next thing to guard against is excessive runner making. To know just when a plant is in prime condition to produce offspring requires a little study of the plant's physical condition, and if judgment is not used at this time there is danger of overtaxing them beyond their strength. When we consider that it requires the same effort for plants to give off young as it does for animals to perform this great function, we can better realize the necessity of restricting this line of effort. Another thing we must bear in mind is that "like begets like" in plants the same as in animals. Therefore, if a plant is allowed to send out runners before it has made a vigorous start and before it has become strongly established in its new quarters, the plant itself is not only endangered, but the offspring is weakened as well; and the more runners they make the weaker they get, causing a small crop of berries. Here is where that "run out" idea again comes in. A runner first starts near the base of a leaf in the form of a bud. This continues to grow

in length until it becomes from four to twelve inches long, according to variety. At the end of this a node is formed; then this new bud, or node, bursts into life, sending up small leaves, and if soil conditions are favorable, roots will start down, and the chances for good offspring largely may be increased by placing dirt on the runner just back of the node, which will hold it to place, and also will retain moisture that will encourage the roots to take hold and feed on mother earth. Until then it must draw its sustenance from the mother plant through this runner wire, which performs the same functions in the plant as does the umbilical cord in animal life before birth. In the case of the animal, should this cord be disconnected prematurely from any cause, death would be the result. After birth, the young starts feeding from its mother by a different process, when the navel cord ceases to be of use and withers away. This method of feeding will continue until the young is able to take food independently, when the mother refuses to furnish her support. This is called weaning. Just as soon as this weaning takes place, the drain

Strawberries and How To Grow Them



THE R. M. KELLOGG CO.'S BATTALION.

THIS picture was taken just after the noon hour, and about fifty of our employes failed to get back from dinner in time to swell the crowd. During the digging and shipping season we have three hundred men and women on our pay roll. In just seven minutes after time is called every employe is at his post and the big machine is under way. A perfect system and perfect harmony; it's "good morning" and "good night". Entertain yourself for a few minutes by trying to count them. The stakes to the right are in Breeding-bed No. 1, and those back of the employes show Breeding-bed No. 2.

stops and the mother begins to take on strength and flesh. The same is true in the strawberry family. Assist the young plants to take root just as soon as they are ready and thus avoid any danger of overtaxing the mother plant. This is one of the features that receives large attention on our farms, and this is one reason why our strain of Thoroughbred Pedigree plants is so strong in its fruit producing organism

How Plants Feed

AFTER we learn how plants feed we better may understand why a healthy, clean foliage is so important to their development. The leaves of plants absorb carbonic acid gas from the atmosphere during the presence of sunlight. This process requires green leaves and the presence of moisture in their cells. Under sunshine part of this water in the leaves and carbonic acid are decomposed, then unite again and form a starchy substance. This starch, combined with the mineral matter in solution, taken up through the sap tissues of the plant, serves as food for the protoplasm of all

new cells, which rapidly increase in number, thus causing the plant to grow. This leaf-formed food feeds the cells in all parts of the plant to the very tips of the roots. It will be seen, therefore, that the growth of the plant depends entirely upon two things: the health of its leaves and an abundant supply of nourishment from the soluble minerals in the soil. So far as health is concerned the same rules hold good in plants as in animals; no one would expect much from animals if their lungs and stomach were not in prime condition.

Growing Fancy Strawberries for Profit

WE have been experimenting for years to determine the best and most economical way to grow fancy strawberries for profit, the largest possible yield of the choicest select berries being the principal feature in view. During these series of experiments nothing but the most simple and practical methods were employed.

These tests have convinced us beyond a doubt of the unequalled merits of thoroughbred plants

R.M. Kellogg's Great Crop of



THE WHOLE FAMILY INTERESTED.

HERE is a typical scene; typical because it so well expresses the fact that the strawberry patch, when it is what it ought to be, and nearly always may be, invariably becomes the center of family interest. The scene is the home of Dr. J. M. Hale of Mt. Vernon, Ind., and the Doctor writes us that this small patch of Kellogg Thoroughbred plants yielded "at least twelve gallons of fine, luscious berries, and I am satisfied several gallons went to waste on account of our appetites' demanding the larger ones; we allowed the smaller ones to go to waste."

and that a profitable crop largely depends upon plant selection; but it is not good business judgment to depend upon this one feature alone. It would be just as reasonable to expect big returns from a cow, regardless of care and feed, simply because she is a thoroughbred. Loretta D., the world's best Jersey, has proved that by combining careful breeding with intelligent care and feeding, a pound of butter-fat can be produced at a much less expense than could possibly be done by omitting any one of these three essential features. The very fact that she netted her proud owner \$67.74 in four months is an overpowering argument. These principles of breeding were carried out in our experiments with the purpose to increase the size and yield of fruit. As the breeding of our plants already had been carried on for a number of years, the first thing for us to do was to make ideal soil conditions by working in an abundance of well-rotted manure and thoroughly incorporating it with the soil grains, after which it was made firm by rolling; then enough plants to set one row of each variety were selected from the breeding bed; cultivation and hoeing were begun immediately

after the plants were set, and repeated in six days; after this, every ten days until it rained. Following each rain cultivators and hoemen were put to work just as soon as the soil would crumble. When runners started each row was divided into three sections, so that each variety could be tested under the three most popular systems; namely: single hedge row, double hedge and narrow matted rows, for the purpose of determining the most profitable way to grow them, the result of which is given of each variety under respective descriptions.

Before any runners were layered the physical condition of each mother plant was taken into consideration; all those that were strong and vigorous were allowed to set their first offspring, but if any were found lagging or backward in growth, they were forced into greater activity by relieving them of their first runners, thus giving us only strong plants that were able to do heavy work.

Just before the ground was frozen we covered the plants with fresh stable manure, putting the strawy part directly on the rows and all decayed matter between them. In the spring when

Strawberries and How To Grow Them



KELLOGG THOROUGHBREDS IN ARKANSAS.

PEOPLE who have read the "Arkansas Traveler" story sometimes think folks down there are not strictly up to date. But a glance at the strawberry bed of M. F. McCord of Rector, Ark., with its straight rows of splendid, well-cultivated plants and interesting group of pickers, will have their minds instantly disabused of such an idea. Progressive people and Pedigree plants go together.

growth started, the coarse material was spread apart directly over the row, so the plants could come up through it; this made a mulch about twenty inches wide, with each row of plants directly in the center, thus avoiding any danger of dirt getting on the berries. A space of nearly two feet was left directly between the rows with no covering except the little decayed matter that was put there in the fall. When all danger of frost was over this space was cultivated and kept in a perfect dust mulch through the entire fruiting season, thus making it possible to hold at least fifty per cent more water in the soil than could be held by any artificial mulch, and at the same time furnishing air for bacteria so they could perform their functions in preparing the plant food in available form for the plant's immediate use.

During fruiting time a plant is undergoing a great strain, and it requires a larger percentage of food and moisture than at any other time of its life, and it cannot mature a large crop of fancy berries and continue the ripening through a long season without plenty of food and water, any more than a cow could give a large flow of milk when deprived of these essentials to production.

The outcome of these experiments was fully up to our expectations, the size of the fruit being increased about twenty per cent, while the yield showed a still larger increase, and there was no extra work attached to the method except cultivation during fruiting time; this really was no more expensive than pulling weeds and grass which are bound to grow up through a straw mulch. The only precaution necessary is to cease cultivating when plants are in full bloom, unless the soil is damp enough to prevent the dust flying. If these methods are closely followed the result will be a much bigger crop of larger berries at a less percentage of cost than possibly can be secured in the old way, proving conclusively that breeding, feeding and care are as essential to success in plant life, and are as quickly responded to by plants, as is found to be true in animal life.

✱

Twenty million plants were shipped from our farm last season, a large per cent of them going to old customers. This is pretty good evidence that the berry growers of this country are convinced that it pays to use Thorough bred plants.

R. M. Kellogg's Great Crop of



PREPARING OUR STRAWBERRY PLANTS FOR THEIR WINTER SLEEP.

OUR Thoroughbred plants not only receive the most careful attention during the growing season, but also are protected against any danger of being weakened by alternate freezing and thawing, by our thorough system of mulching, as shown in this picture. Mulching keeps the plants dormant and the roots remain calloused so they can be shipped to all parts of the country with perfect safety in the spring, and they will start growing quicker and more vigorously than a green plant taken up on your own farm and set out the same day. A well-wintered strawberry plant is like a well-wintered horse. It is full of vigor and strength and will start growing at once.

Mulching

IT is poor business policy to spend a lot of money and hard work on a field of strawberries and then neglect such an important part as mulching; yet hundreds of growers are doing this very thing in order to lower the cost of production. It is all right to cut expenses down, but in doing this judgment must be used lest the profits be endangered beyond the prospective saving. Quality and quantity should be the first consideration in every line of business. The best way to begin saving is by planning your work ahead so that every move will count. Do a little more figuring on profits and not quite so much fretting about expenses.

We always have figured that mulching was one of our very best investments because it meets so many requirements. Like fire insurance, the satisfaction of having protection is worth all it costs. During all of our experimenting the early covering always has proved the most satisfactory. Nature is a splendid criterion to go by, and just as soon as we get two or three light freezes, and the leaves fall profusely from

trees, we start the work and keep it going until every plant on the farm is protected. This early covering is especially valuable during a dry fall; freezing and thawing are much more injurious when soil is dry than where moisture is present. Even if a short, warm spell does come after the plants are covered, it will do no harm, providing the work has been properly done. The right way is to mulch heaviest between the rows, covering the plants just enough to shade them; this will prevent bleaching.

It isn't freezing that injures plants, but when it freezes hard at night and the sun shines bright the next day, it thaws. This alternate freezing and thawing causes contraction and expansion, which break the roots from the crown or body of the plant. If they are shaded with a light covering the ground will not thaw out on hot days but will remain frozen solid, and when a long warm spell does come, the frost dissolves on the under side first and the plants will settle gradually with the soil and not be injured.

Mulching has three distinct advantages besides protection against freezing and thawing.

Strawberries and How To Grow Them



A PERFECTLY EQUIPPED PACKING HOUSE.

THIS picture shows the interior of our packing house, which is the largest and completest one in the world devoted exclusively to counting and packing strawberry plants. More than one hundred people are employed in this building. The counting is all done by careful women. Every department is under a responsible foreman. Each variety has its own stall and every bunch is labelled, which precludes any possible chance for mistakes. No talking or whispering during working hours; every detail of the business is dispatched with absolute accuracy.

First, it holds the plants dormant and keeps them strong so they will be able to do heavy work when the proper time comes. Second, it holds moisture and keeps the ground at a more even temperature during a dry, hot season, and this prevents the berries from ripening all at once, while moisture adds to size and uniformity. Third, the rain drops first strike the mulching, then soak gradually down into the soil, preventing the splashing of dirt or sand upon the berries and keeping them clean. This alone will make enough difference in price over dirty fruit to more than doubly pay the cost of mulching, besides adding to the grower's reputation.

As to what this mulch covering shall be composed makes very little difference. Wheat, rye or oat straw most generally is used; marsh hay is used in some places, and it makes a very good mulching. The fodder from thickly sown corn is excellent, as it never contains any weed seeds and always stays just where it is placed. It should be cut before the leaves get fully ripened so it will remain tough.

In the spring, just as soon as growth begins, go over the strawberry field and part the mulch-

ing directly over the row. This is best done by taking a common fork and working it lightly back and forth over the plants, leaving an equal amount of covering on each side of the row

Marketing Strawberries

BIG, red, well-formed berries neatly put up in boxes, form one attraction that none may resist, and the grower who raises berries of this kind and brings them to market is as sure of a ready sale at a good price as he is that the sun will rise in the east on the morrow. You never hear folks who grow Kellogg's Thoroughbreds and follow their cultural methods complain of slow sales or low prices.

One of the first steps to success in commercial berry growing is to build up a trade in your particular product. If you use a label and make every box bearing that label a "pon honor" box; you will not be long in doing it. People will soon learn your honest methods and call for berries bearing your label. After your reputation is established your berries will sell on their merits and will become famous. There are a number of ways in which ber-

R.M. Kellogg's Great Crop of

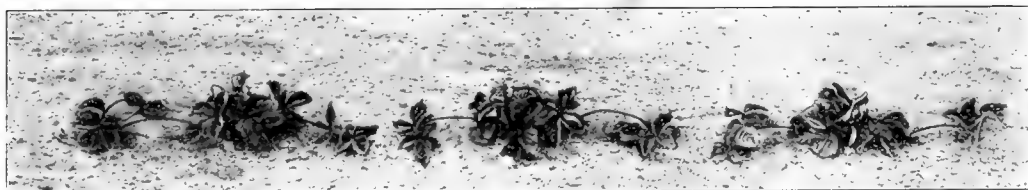


LINING UP THE BERRY PICKERS,

THIS picture represents F. E. Beatty and his foreman lining up the pickers on his famous fruit farm at Covington, Ind. Mr. Beatty stands at the left, instructing his pickers that his foreman fully understands how the berries are to be picked; that they must do the work according to the foreman's orders. The foreman stands at the right ready to take full charge. With such a perfect system as this all confusion is avoided and the work made easy for foreman, employes and proprietor.

ries can be marketed at a big profit, and each grower should adopt the methods best suited to his own particular location. One of the most successful ways is to make arrangements

with the most reliable, up-to-date grocer in each town, giving him the exclusive sale on your berries and having it understood that you are to grade them and that they will be put up



THE SINGLE HEDGE SYSTEM OF PLANT SETTING.

THE single hedge is made by layering the runners in a straight line. The three large hills are mother plants, each one sending out two runners, as shown in picture. The distance for setting will depend on the variety. Carefully read the descriptions given under the berries, where we give full directions for setting each particular variety. In the hill system set the plants about fifteen to twenty inches apart in the row and have the rows about thirty inches apart. Keep all runners off, allowing nothing to grow except the mother plant. Hill culture will not pay unless the soil is made extra rich; when this is done the plants will stool up until they will touch each other.



THE DOUBLE HEDGE SYSTEM OF PLANT SETTING.

IN forming a double hedge row, allow each mother plant to make four runners, layering them zig-zag or X fashion, as shown in picture. Keep the vacant spaces between young plants well hoed to prevent the forming of crust. Varieties making long runners can be set farther part in the row than short runner makers, allowing them to make eight plants instead of four. A few varieties will do heavier work in narrow matted rows than in any other way. Let the plants run until the row is about fifteen inches wide; after this all other runners should be cut off. In the fall before mulching draw a garden rake lightly through the plants; this will pull out those which are weak and poorly rooted.

Strawberries and How To Grow Them



IT TAKES THOROUGHBREDS TO DO IT.

THAT is the conclusion of F. E. Gahringer of Racine, Minn., who writes under date of July 25 1905, when sending us the above view of his strawberries, saying: "I have learned that it takes Pedigree plant to produce the 'big red' berries. My six rows, each of which was nineteen rods in length, brought me \$125. This sum does not include what I preserved, gave away and consumed for family use from June 17 to July 20, the latter being no small item. I feel well repaid for the time spent."

in fancy style. A good grocer and fancy berries make just the combination to insure an immediate sale at top prices.

Then a tremendous quantity of berries may be sold at retail direct from the field or packing house by advertising in the local papers. A small advertisement in a few of the best papers will bring customers from a long distance. A great many people prefer to buy direct from the grower and you will be surprised how buyers will drive in from different towns as well as from the country and take berries home by the crate for canning, etc. This is an especially desirable way to dispose of your second grade berries, as it doesn't pay to ship them. Any grower is bound to have a few of this kind that have been graded out from the fancy stock.

One of the most satisfactory and profitable ways of disposing of the berry crop is to sell to the people of your own city or town. One of the leading growers of a Western state has an extensive plantation just on the outskirts of a city of 16,000 population. He employs two bright young men as "city salesmen" and each drives a wagon about the town, making large

sales every day during the season. Not a box of the berries grown on that place finds its way to the railway station; and the prices received are top prices.

Never in all the world has there been an overplus of fine-flavored, juicy strawberries, and we don't believe there ever will be. There may be carloads of little, dried-up, green-topped, vinegary things that masquerade as strawberries, rotting in the town stores, but they won't affect the sale of a single box of your whole crop if yours are Thoroughbreds.

Preparing for Second Crop

IN preparing the fruiting bed for second crop just as soon as the berries are all harvested mow off the foliage close to the ground, letting it lie for about thirty-six hours. Select a day when there is a brisk wind, go to the side of the field from which the wind is coming, take a fork full of straw and lighting it with a match, walk along the end of the field, carrying the fork full of burning straw close to the ground, so the dry foliage and mulching will catch fire. The burning destroys all insects, fun-

R. M. Kellogg's Great Crop of



\$960 FROM AN ACRE.

NEW HAMPSHIRE is promising to become as famous for its big yields of strawberries as it is for its granite hills. Francis A. Badger of Belmont, N. H., raised \$50 worth of Thoroughbred strawberries on one-sixteenth of an acre in 1905, which is at the rate of \$960 an acre, and writes us that next year he will have a real commercial garden, as he had "set 3,000 Kellogg plants this year and only lost 1 per cent in the hardest season for setting I ever knew."

gous growth and many weed seeds. Immediately after the burning a bar shear or common breaking plow is used to throw a furrow from each side of the row into the center, cutting the row down to about five or six inches wide; following this is a common harrow, going in the same direction as the plow, crossing it the next time. This draws fine soil over the crowns, which is to assist them in starting the new root system; these roots are formed just above the old ones at the base of crown and give the plants a vigorous start into a new life. Soon we have rich, green rows across the field and right now is the time to go over them with hoes, cutting out all weeds and any weak plants, leaving the best hills about sixteen inches apart.

Starting a Berry Farm on Little Capital

IF a young man waits until he earns enough money to start a business of his own without going into debt, it is quite likely the best part of his life will be spent in working for others. About all of the large business concerns in this country have grown up from almost nothing; this is due to the fact that some men

having a good idea also possess the grit to use their own judgment in working it out, regardless of debt or any other obstacle which lies in man's power to overcome. The starting point in life is to decide on what you want to do and—do it. If you have decided to go into the berry business and your capital is not sufficient to start with at once, then go to some one who owns land, tell him your exact circumstances and what you want to do, and arrange with him to sell or lease you a few acres on easy terms. Most any land owner will do this with an honest man; in fact, honesty is the best capital one can have. Without it, no one can win success. Honesty and truthfulness will do more toward building up a business than money.

Be up to date and progress with the times; prove to the person who furnishes the land that you are going to be the leader on the market. Every dollar should be deposited in some bank, and your bills paid by check. This will give you a credit there and small sums can be borrowed if it becomes necessary. Be prompt in meeting all your obligations; if a note becomes due before you are in a position to take it up,

Strawberries and How To Grow Them



171 QUARTS FROM 110 PLANTS--WHAT ONE AMATEUR DID.

THE first crop of strawberries R. D. Turney of Sumner, Ill., ever grew was in 1905, and the above is a picture of his "patch." He writes us: "I don't see how any man can afford to do without strawberries when with so small an amount of labor, land and money he can have so much real happiness. From a plot of ground 30x44 feet, or 110 plants, I gathered 171 quarts of the finest strawberries I ever saw anywhere, and I am an inexperienced man in the business. I can't say enough for the Kellogg Thoroughbred plants."

go to the party holding it and ask for an extension; never shun a creditor; either pay your bills when due or explain why you cannot pay them. This will give everybody confidence in you, and it will be an easy matter to get all the credit needed.

Strawberries and Joy in the Home Garden

THE happiest men are those who do all in their power to make the family and the rest of the world happy, and one of the best ways of doing this is by providing a good bed of strawberry plants from which to pick fresh berries, whenever they want them.

Who has a better right to all the strawberries he can eat than the farmer? If he does not have them, whose fault is it? No family garden is complete without them; it is just as easy to grow strawberries as it is to grow anything else in the garden. They are the very first fruit to ripen, coming at a time when the wife is at her wits' end to know what to have to help her prepare a complete meal. And there are many ways in which they can be prepared for winter use. After you begin growing them, the whole

family becomes so much interested that it seems more like play than work; the very thought of big, red strawberries makes everybody hungry, and it is only a short time until it leads up to a family love feast, and this is what makes boys and girls love the farm; and the way to keep them from getting the town fever is to make everything on the farm inviting and attractive. Provide all the luxuries that the city can offer, including strawberries and cream, shortcake and pie. What boy could be induced to leave such a home as that?

In a few weeks after the plants are set out in the springtime the beautiful green rows will add much to the appearance of the farm; and when the vines are covered with rich red berries they will add joy and satisfaction to the whole household. It would then take more than the small cost of plants to induce the farmer to give up his strawberry bed. In fact, he couldn't give it up; the children would protest, the good wife would lose her smile and life would become miserable.

The cost of plants is no more than the cost of garden seeds, and they are the easiest things

R. M. Kellogg's Great Crop of



THIS photograph of the strawberry farm of A. E. Woodward of Rexford Flats, N. Y., suggests the pleasure one may find in the culture of that berry. Mr. Woodward's letter suggests also the profit to be found in that calling. He says: "In the spring of 1904 I set three-fourths of an acre with Thoroughbred strawberry plants bought of you, and although it was extremely dry and hot for ten days after they were set, nearly every plant lived. From the three-fourths acre we sold 4,384 quarts (besides using and giving away large quantities) of extra fine berries, which brought nearly twice the price per quart paid for average berries in our market." When a grower gets at the rate of 6,000 quarts to one acre, he's doing business. Those who use the Kellogg plants are the ones who accomplish it.

on earth to grow. Read "Great Crops of Strawberries and How to Grow Them." It will tell you just what to do and when and how to do it. You never can realize how delicious a strawberry is, until you have grown it yourself and picked it fresh and luscious from the vines.

Women as Strawberry Growers

THE success with which many of our lady customers are meeting is worthy of more than a passing notice. No other out-door employment offers larger opportunity to the enterprising woman than does strawberry culture, and the field is a wide and an open one.

Mrs. Emma Flora of Conneaut, Ohio, writes under date of July 16, 1905, that from 1,500 plants set in 1904 she realized \$150 in 1905, notwithstanding the plants did not receive the best of attention. She adds that next year she will set out twelve of the Kellogg varieties and go into the business on a more extensive scale.

Mrs. Mary Moyer of Devil's Lake, Mich., writing of the Kellogg plants, says: "We never before have had such nice plants as these.

I enjoy the berry work very much. I set all plants and pick most of the berries myself."

Miss S. M. Pollard of Woodside, Minn., sends us a clipping from a local newspaper and says it was with Thoroughbred plants that her success as referred to therein was made. She says that the 1905 crop was her first attempt at raising strawberries, yet from about eight rods of plants she had sold on July 19, 400 quarts and had about 300 more to gather. The newspaper clipping follows:

"The largest and nicest strawberries we have had the pleasure of seeing this year, or in fact any other year, were brought to our office last Thursday by Miss S. M. Pollard of Woodside. The size of the berries is something phenomenal, some of them measuring five inches and a half in circumference, while the flavor is sweeter and more juicy than the western and southern berry."

Important Helps to Business

THAT berry growing is a business requiring order and system every day becomes more evident. The actual work of the farm and the fruit garden becomes of increasing importance each year, but not more so than the marketing of their products. Nothing else is of greater

Strawberries and How To Grow Them



THOROUGHBREDS THRIVE AMONG THE GIANT FIR TREES OF SNOHOMISH.

WHAT pioneer of days that are past but will find in this unique picture a reminder of those days so full of toil, yet in which there were pleasures the city cannot give? It is the strawberry bed of William L. Cochran of Snohomish, Wash., in a clearing carved out of the mammoth fir trees of that region. In a letter dated August 1, 1905, Mr. Cochran says: "My experience with the Kellogg Thoroughbred strawberry plants has been so good that hereafter I shall use them to the exclusion of all others."

aid to the business fruit grower than good printing and in response to innumerable inquiries and requests we have decided to furnish our friends all over the country with letter-heads, envelopes, etc., all neatly printed on excellent stock and at prices so low as to make them actually cheaper than the unprinted letter-heads and envelopes.

Here is a reduced specimen of our berry pickers ticket, one of the most important helps to a safe and rapid system of handling the field work when things are fairly humming in berry time.

4	4	4	4	4	4	4	4	4	4	4	1	1
R. M. KELLOGG CO. STRAWBERRY GROWERS THREE RIVERS, MICH.												
1	1	1	1	1	1	1	1	1	1	1	1	1
4	4	4	4	4	4	4	4	4	4	4	1	1

it will be observed that there are ten figure "4's" on each side, each four representing a gal-

lon, and twenty figure "1's" at the end, each standing for a quart, the aggregate being one hundred quarts. These are punched as the picker delivers his berries, and he keeps them until pay day, receiving a new ticket, of course, when the one hundred numbers have been punched out. This system of tickets, with one of our punches, makes the most complete system ever devised for keeping a record of the work of the pickers and the amount due each at pay time.

The business strawberry grower can't afford to be without such aids to economy, expedition and good business methods, and we hope that all will equip themselves in readiness for a big business, carried on in the most modern way.

PHILLIP DINES of Novelty, Ohio, writes us under date of July 13, 1905: "Just before strawberries ripened I was over at Mr. Winslow's at Chesterland, and I never saw such a grand sight in all my life. Mr. Winslow is raising berries by the hill culture method, and the plants, I believe, would measure a half-bushel around, with from three to six crowns, just loaded with berries, resembling a swarm of bees on the limb of a tree. Had anyone told me the story, it would have been in vain, but since I saw it I know it was so. Mr. Winslow told me that the plants came from the Kellogg farms, and he set 12,000 more plants this spring. My own plants from your farm also are doing well."

R.M. Kellogg's Great Crop of



HERE is a new way to serve strawberries. Simply take a spray of nice, clean leaves, lay three of these sprays on a plate, with stems to center. Have berries picked with long stems and lay one on each leaf, which will make nine berries for each guest. A large leaf also should be put on a small butter individual and filled with powdered sugar. This is a beautiful way to serve them for weddings, banquets and tea parties.

Long-Distance Shipments of Plants

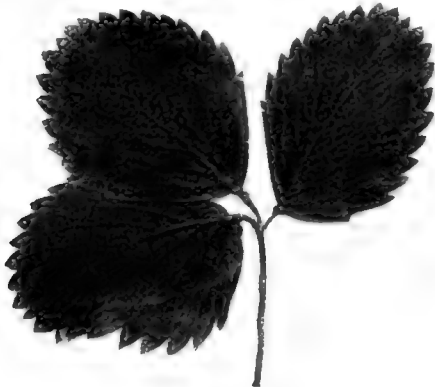
IT is a pretty good test of a plant's vitality that it has withstood the 13,000-mile journey to Australia and then, set out in the soil of the antipodes, grows strong and lusty, building up a noble foliage and yielding an abundance of big, red, luscious berries.

T. Herbert Beckett, of Fendalton, Christchurch, New Zealand, writing the Kellogg Com-

pany under date May 6, 1905, says: "I enclose a leaf picked off a 'Gandy' plant, which I think you will admit is a very good size for one season's growth, considering it had no leaves to

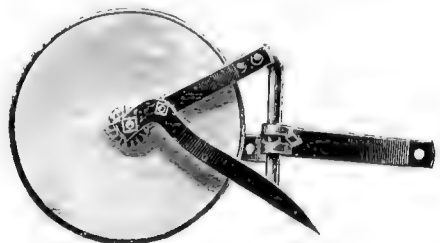
speak of when it arrived here five months ago; only a few pale-green buds, or shoots." It is only one instance of the ability of the Kellogg plants to live and thrive under trying conditions; but we have had the leaves photographed and present it herewith.

One of the strong features in the work of this company is the manner in which its plants are packed for shipment. The nature of the plant is considered quite as much at that stage of its career as when it is in the breeding or the propagating bed. This is one of the reasons why the Kellogg Thoroughbreds so readily accommodate themselves to soil and climatic conditions, no matter how unlike those to which they are native.



pany under date May 6, 1905, says: "I enclose a leaf picked off a 'Gandy' plant, which I think you will admit is a very good size for one season's growth, considering it had no leaves to

Roller Runner Cutter and Leaf Guard



An essential tool in the strawberry bed. Price \$1.75.



A PLATE OF PRIDES OF MICHIGAN.

THIS picture is to show how berries should be served with stems. Make a mould of powdered sugar in a wine glass and turn it out on a small individual butter dish. Set this in the center of a large plate and surround it with just such berries as these, and you will have one of the most delicate and attractive dishes of strawberries ever placed on the table.

R-M Kellogg's Great Crop of



\$150 From a Quarter of an Acre

THIS is the neat and comfortable home of James M. Bateman of Harrisonville, Mo., who thus reports his 1905 experience with Kellogg's Thoroughbreds: "I had something near one-fourth of an acre of strawberry plants this year and picked about 1,800 quart boxes from them. The average price received was 8½ cents a box, which would make \$150 for the quarter of an acre."



A Handy Carrier

GOOD, strong carriers are essential to the proper handling of a crop of strawberries. The cut here-with shows a simple, strong and convenient carrier. We prefer this four-box carrier to the six-box form because they are more quickly filled and thus the berries are the sooner taken in out of the sun. Berries always should be carried into a cool place immediately after being picked.

\$100 From 1,000 Plants

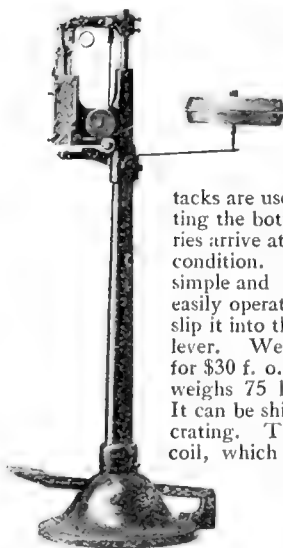
FROM away up in Nova Scotia comes a word of cheer. David L. VanBuskirk of Upper Pugwash, N. S., writes us: "We picked about 1,000 boxes of berries from about 1,000 Kellogg plants set one year; and I think there would have been a great many more but for a heavy frost June 7 that took about all of the early blossoms. But notwithstanding we sold \$100 from that plot and ate and gave away more than 100 boxes. Your plants grew the largest and finest berries ever grown here."



Where the Difference Comes in

J. C. JONES of Thompsonville, Ill., sends us this view in his strawberry garden, accompanied by some interesting facts about his work. The area used is 108x20 yards, the number of plants set 2,376. The 1905 yield was 152 24-quart cases of strictly fancy fruit. A selection of twenty-six berries makes a heaping quart. He adds: "I set my patch of 2,376 plants and my friend within half a mile of me set 600 plants of the same variety at the same time, on the same kind of soil, worked with the same cultivator, mulched at the same time and the mulch removed at the same time in the spring. Apparently they were the same. I gathered from my 2,376 Pedigree plants 152 24-quart cases. My neighbor gathered from his 600 Michigan plants twelve cases and of a much lighter grade of fruit. But please don't understand that his 600 were Pedigree plants."

"Standard" Stapling Machine



WITH this machine one man can make more berry boxes than three men could make with hammer and tacks. The stapled package is neater and stronger, which makes the berries show up nicer. When

tacks are used, they often break, letting the bottom fall out, and the berries arrive at destination in a mused condition. The machine is very simple and substantially made; it is easily operated; simply fold the box, slip it into the slot and press the foot lever. We can furnish it complete, for \$30 f. o. b. St. Joseph, Mich. It weighs 75 lbs. net, 100 lbs. crated. It can be shipped by express without crating. The wire costs 90 cents per coil, which will make about 10,000

boxes. Only the best of material is used in manufacturing these machines and they are fully guaranteed. We have

used one for ten years and it still is as good as new. No other machine will prove more serviceable to the commercial strawberry grower. Everyone engaged in the business should have a stapling machine.

Strawberries and How To Grow Them

Correct Description of Varieties.

EVERY variety listed in this book has been thoroughly tested in our experimental plot, unless otherwise specified in the description. This gives us a full understanding of their habits of growth. A close watch is kept on each variety from the time plants are set until berries are picked, and every little detail relating to foliage growth is noted down. At fruiting time the size of berry, flavor, color, firmness, quality, productiveness and everything pertaining to the berry is taken from actual tests. We do not guess at anything, but depend entirely upon records. In the description of each variety we give the number of years it has been bred up by selection from ideal mother plants of known fruiting vigor; we also give the method of growing them for best results. When stating that a certain variety does well everywhere, we get our authority from reports furnished us by growers using our plants all over the country. But remember that these results which we and our customers are getting cannot be obtained with plants that have become weakened by pollen exhaustion or careless propagating from run-out beds. Plants that were bred up from a long line of ideal ancestors and grown under our methods will justify every statement made concerning each variety.

Care of Plants

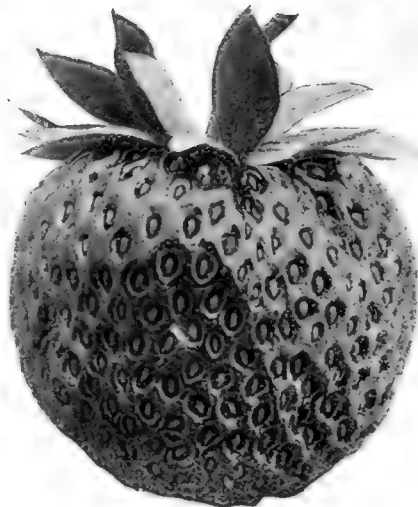
A POSTAL card will be mailed to you when the plants are shipped, so you should be on the lookout for them. Our system of packing is the most perfect that can be devised, and we have shipped plants for years to the most distant points with complete success. If you will give them the same care we do every one will grow. When you receive them, if you are not ready to set them out do not leave them in the package, but dig a shallow trench in a shady place, open the bunches, spreading out the roots, and heel them in, allowing the crown to come even with the surface of the ground.

Number of Plants Required to Set One Acre

Rows	24 inches apart and 20 inches in the row,	13,160
" 30 "	" " " 24 " " " "	8,712
" 30 "	" " " 30 " " " "	6,970
" 30 "	" " " 36 " " " "	5,808
" 34 "	" " " 30 " " " "	6,150
" 36 "	" " " 30 " " " "	5,808
" 42 "	" " " 24 " " " "	6,223
" 42 "	" " " 20 " " " "	7,468
" 48 "	" " " 20 " " " "	6,534

71½ Quarts from Seven Dozen Plants

THE above is the record made by J. H. Stewart of Dixon, Ill., who wrote under date of July 12, 1905: "Those seven dozen Thoroughbred plants you sent me yielded 71½ quarts of nice large berries. I expect 100 quarts next year—great large ones at that."



Excelsior, B. (Male.)

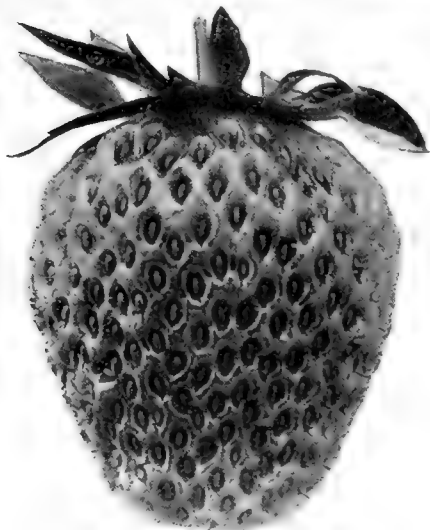
EXTRA EARLY. Bisexual. A medium-sized, dark red berry, almost round, with small, dark seeds, which gives them such a bright shiny appearance they fairly glisten in the box; the green calyx curls back a little and makes a charming contrast. The inner part is a rich red, just a trifle lighter than the surface, and is of a solid, meaty texture, very juicy, with a rather tart, but exceedingly rich flavor; it makes a splendid canning berry, because it retains its shape better than do most varieties after being cooked. As a shipper it is unexcelled; the form and color are retained for days after being picked. All these good qualities, combined with its productiveness and earliness, make Excelsior a most profitable berry for market purposes. The fruit runs even and but very little sorting is necessary.

The foliage is a bright dark green, grows upright and quite thick, protecting its bloom from frost. It has a long blooming season for such an extra early variety. The flowers are medium sized and very rich with pollen. This makes it ideal for mating early pistillates. Runners form profusely and the plants do not get large in the propagating bed, but when selected from strong mother plants, as is done on our grounds, the small size cuts no figure. They are deep rooters and heavy crown builders and that is what is required to make a big crop of fancy berries.

The best system for growing Excelsior is in single hedge rows; in this way only the strongest runners are allowed to set—the balance are kept off by pinching or cutting them when hoeing; this makes a continuous line of high-grade plants; then the sun can beat on every leaf and crown. The Excelsior thrives on medium rich soil, and with a rough-and-tumble treatment, but it will pay handsomely for all the extra manure and care it gets. One thing is certain: it does not pay to neglect them in any way. Just try them on good soil with good care and note results; then pack the fruit nicely by arranging the top layers with stems down, showing only the glossy part, and hungry customers will be only too glad to pay your price.

This is the tenth year Excelsior has been under our system of breeding by selection, and we think more of it than ever.

R-M-Kellogg's Great Crop of

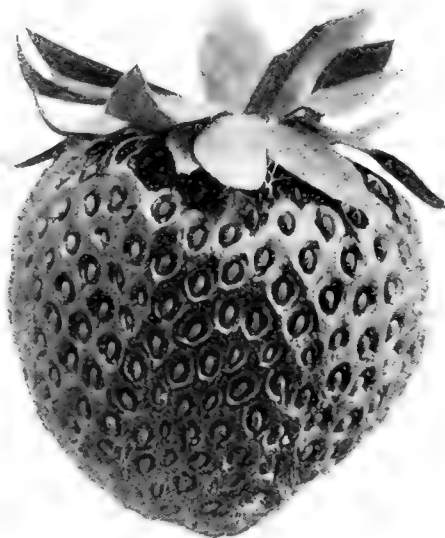


August Luther, B. (Male.)

EXTRA EARLY. Bisexual. Medium, large, bright-colored berry, very round and full at the calyx and tapering to a blunt point with very prominent seeds of rich yellow that shine like little specks of gold. The inner part is a wine color, running lighter toward the center; it has a very fine-grained meat of a mild, delicate flavor. The calyx curls back a little towards the stem, and is attached to the berry by a small neck which makes easy and quick work cleaning them for the table. On account of its productiveness and high quality combined, it has become very popular, both as a market and family berry; there are but few kinds that can equal it for dessert and shortcake. It also is a splendid shipper, as the surface is tough enough to prevent juice from seeping out unless badly bruised.

The foliage is medium tall, with a long dark leaf that spreads out over the big load of fruit. Like all extra early kinds, it makes plenty of runners and this prevents plants from growing large in the propagating bed; but they stool up wonderfully when restricted to narrow rows.

The most profitable system of growing August Luther is in single hedge row. Set the plants about thirty inches apart in the rows and allow each of these to make four runners, layering them in a straight line; this gives a continuous row of vigorous plants with seven inches of space between them; this allows plenty of room for spreading and stooling out, giving the sun a fair chance at crowns and foliage, and this is what helps to develop the big, red berries, and also brings out that bright, glossy color. Give them medium rich ground and good cultivation, and they will do all we claim. Pack top layer on end with stem down. This is the seventh year in our breeding bed, with special care in making selections from the most promising mother plants, and the old saying that blood will tell, has proved to be true with our strain of August Luthers, as the demand always has been greater than the supply. This year we have a big stock and can fill all orders that come to us early.



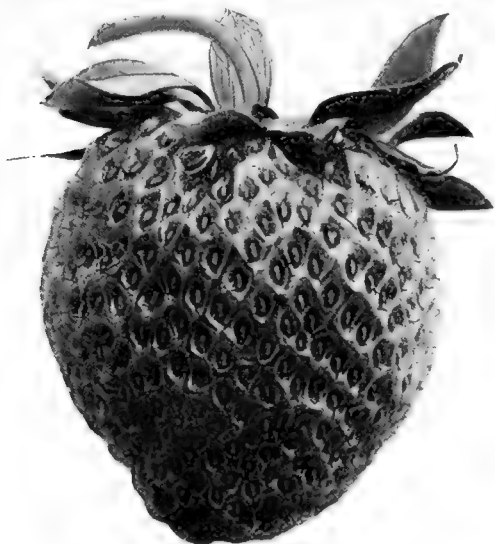
Climax, B. (Male.)

EXTRA EARLY. Bisexual. Produces big conical berries in great quantities. They are dark red with glossy surface. For exact size and shape see illustration. We wish the beautiful, rich color also could be shown in the photograph. If you want to see the real beauties just try our strain of plants on your own grounds. The seeds are bright yellow, except on the darker side, where they are a trifle lighter than the berry. The dark red extends through the berry's center. Very firm flesh, also rich and juicy. In fact, it is an ideal berry for all purposes, such as dessert, short cake and canning, and is a splendid shipper. It is a profitable variety to grow for market on account of its productiveness and superior quality. The calyx is small for such a large berry. The plant is a tall, erect grower, having leaves which are almost round and of such a waxy, dark green that it fairly glistens; the berries are evenly distributed all through the vines, thus preventing them from ripening all at once and insuring a longer marketing season. Another good feature about Climax is: the berries will keep in good condition on the vines for several days after they become ripe. With all these valuable points, it is bound to take a place well up to the head of the list of standards. Wherever seen in fruit, it has become a great favorite in that locality. Grow it in double hedge rows; set plants about twenty-four inches apart in the rows, as they make short runners. Each mother plant may be allowed to make six or eight more if they are well spread out. If you would arrange the berries so as to get your own price, just place the top layer with stem end down and you need not be afraid to put them on any market in the land. This is the second year of selection in our breeding bed, and it is showing up grandly as a heavy crown builder and strong pollenizer. The call for these plants last year far exceeded the supply, and it will be greater this season, but we are ready to meet it with a large and excellent stock.

✂

If you cannot use the Golden Rule in your business, it will not pay to continue it.

Strawberries and How To Grow Them



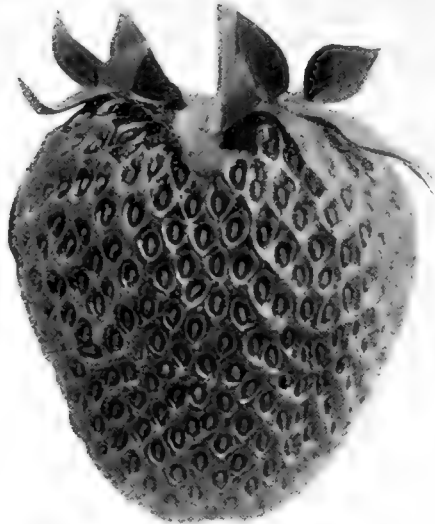
Texas, B. (Male.)

EXTRA EARLY. Bisexual, of unquestionable merit, producing immense crops of large, handsome, crimson berries with a dark red cheek; their beautiful cone shape and waxy surface gives them an appearance of being moulded to order. The seeds are a bright yellow, crimson on one side, running to a dark brown on the other; these catchy colors, combined with the pretty green calyx partly drooping over the berry, makes a display of beauty that at once commands favorable attention, and when bitten into they are found to be very rich and juicy, with the same color on the inside as on the surface. It is of a firmness that will stand shipping a long distance, and it also is ideal for canning.

The foliage grows upright and is quite tall, with a rather long, light-green leaf. It is an easy variety to handle in the fruiting bed, as its disposition is towards building crowns rather than an overproduction of runners, as is the case with most extra-early kinds. The first nodes form and take root about ten inches from the mother plant; this allows plenty of room between plants for air and sunshine. It has medium-sized bloom and is a good pollinizer. In order to get big results it should be grown in single hedge rows so they will have a good chance to spread their thick foliage sufficiently for the sun to get in its work and put on the finishing touches. The Texas seems to thrive on all classes of soils; it doesn't require much manure to stimulate a heavy vegetative growth.

In packing a cone-shaped berry like Texas, put the stem end down, so the shining tips will be exposed to full view, which will add two or three cents to every quart. The packing should receive as much attention as any other branch of the business.

We have had Texas in our breeding bed for four years and safely can recommend it, both as a valuable market and table berry. The demand for our strain of plants always has been too large for the supply. This year our acreage has been increased greatly, but the demand also will grow, so we urge everyone to send in orders early.



Clyde, B. (Male.)

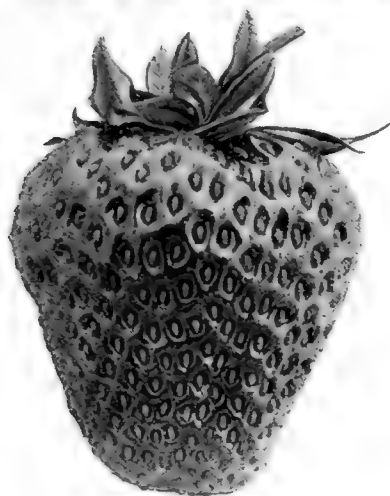
MEDIUM. Bisexual, extra large, cone shaped with one side a bright crimson, while the other is a rich creamy color, with just enough pink to make it show off well; they are never misshapen and so even in size that it hardly is necessary to sort them; the seeds are so nicely embedded in the flesh that they barely come even with the outer edge, which gives them the appearance of moulded wax. The inner part is of very fine texture, colored with rich pink, has a delicate taste and retains its natural flavor when canned; the berries are firm and hold up well after being shipped; it is exceedingly productive, the big waxy berries lie in piles around the plants. We have had them start to ripen with the earliest and continue through the entire season, and the fruit was extra fine at the last picking.

The foliage is light green, with a spreading habit and has wonderful power in building up a big crown system, it is a sight worth seeing at blooming time; the entire foliage is covered with a snow-white veil, dotted with rich golden pollen.

It should be grown in single or double hedge rows on soil made rich by working in plenty of manure. Cultivate the plants until light freezing starts; this will force the vegetative parts. Late in the fall mulch with stable manure, putting the straw part directly on the plants and the decayed matter between the rows; if manure is scarce, use straw, and in the spring when growth begins, top dress with forty pounds nitrate of soda to each acre and repeat this just before the buds open. When manure can be had the nitrate of soda will not be necessary, as the leachings from manure will furnish an abundance of nitrogen to build up a strong foliage, which is required to mature such a big load of berries as Clyde produces. This is our method and it never fails to bring every berry to perfection.

In packing the fruit to show most attractively, place the top layer with stem-end down and they always will sell at the very top notch. This is the twelfth year of selection in our breeding bed, choosing mother plants that build up a large foliage and ideal fruit. Our strain of Clyde plants has won an enviable reputation; last season more orders came to us than could be filled. We have doubled the acreage this year and hope to be able to fill all orders for them.

R. M. Kellogg's Great Crop of



Michel's Early, B. (Male.)

EXTRA EARLY. Bisexual, and one of the oldest in cultivation, with medium-sized crimson berries, evenly colored all over, with just a little variation in form; some are nearly top-shaped, while others are round. This difference only adds to their beauty when nicely placed in boxes. All the seeds are light brown except on the tip end; these are a bright yellow. The surface is rather dry, making it a splendid shipper; it has a very rich, mild flavor, quite solid meat, of deep pink. The calyx is medium, and stands out straight. It is positively one of the best table berries in the extra-early list, and some southern growers still cling to it for their early market berry.

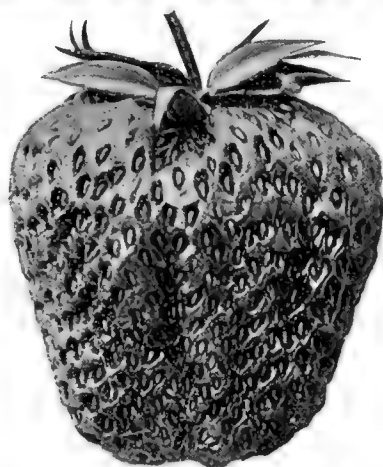
The foliage is tall, of light green, with rather long leaves; it makes lots of runners, which prevents the plants from growing large in the propagating bed, but just keep them restricted to narrow rows, and they will develop a big crown system. The bloom is full of rich pollen, making it a good safe variety for mating purposes.

On account of making so many runners, it should be grown in the single hedge row; this gives each plant a good chance to spread out and make plenty of buds. A great many growers fail to get satisfactory returns from it because they allow them to mat too thickly.

When packing, set top layer of berries on end; this shows only the crimson tips with yellow seeds, and makes a better appearing package than if laid in carelessly. This makes the fifteenth year of selection and restriction. Our sales last season for Michel's Early showed a big increase over former years, and we have grown a larger crop than ever for this season's trade.

Broke all the Records

FROM British Columbia A. J. Wigen of Creston, in that far-off section, writes: "It is with great pleasure I write you after harvesting my first crop of strawberries from 8,500 plants received from you in the spring of 1904. The result has been 650 24-quart crates, selling at an average of about \$2 per crate and netting for myself and son's labor about \$800. I have broken all records in Kootenay, and my product is the talk of the district."



Tennessee Prolific, B. (Male.)

EARLY. Bisexual. Extremely prolific, of medium large, bright crimson berries that are rather long and corrugated, the seeds color up red as the berries ripen and are quite prominent. It has a fine-grained flesh of rich pink, with plenty of juice to make it good for all table purposes, as well as for canning, and its close-grained surface makes it a splendid shipper. It has a large calyx which droops over the berry as if trying to shade it, making a pretty contrast of bright red and green.

The foliage is tall, light green, having an upright habit and long, heavy fruit stems; when in full bloom, the entire foliage is almost covered with white and yellow; this, with pretty green leaves as a background, makes a perfect flower garden. It is a splendid pollinizer and is largely used for that purpose. Owing to its tendency to make many runners, it is impossible for the plants to grow large in a propagating bed, but they get down to business and stool up to mammoth size in the fruiting bed when restricted to single hedge rows. It is not fastidious as to soil; its long roots go deep down, enabling the plant to stand a drouth well.

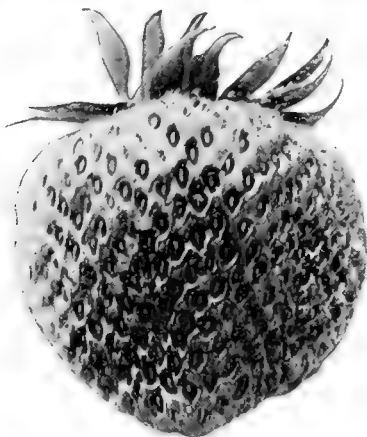
Pack the berries with top layer on their sides with brightest cheek up; this will catch the eye and purchasers will not expect to buy them at the regular market price, but will be willing to pay extra to get them. The grower who takes pride in arranging his fruit tastefully is justly entitled to a good profit.

This makes the eighteenth year we have had Tennessee Prolific under our method of selection, which in itself should be a guarantee of its high quality.

Bud Variation

BUD variation is any change in the glands of the plant which shall cause it to produce a different fruit. These variations are constantly going on in all trees and plants propagated by buds, cuttings and runners and lay the foundation for improving them. This is the basis of the Kellogg idea, and it has been proved to be correct by years of steady improvement of the strawberry plant through selection and restriction.

Strawberries and How To Grow Them



Bederwood, B. (Male.)

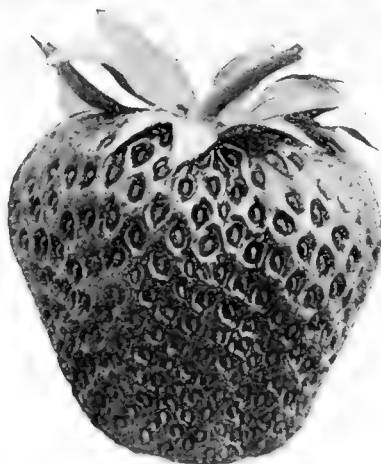
MEDIUM EARLY. Bisexual. Producing medium-sized berries of a delicate crimson color and a rather glossy surface, with deep yellow seeds. The calyx is very small, lying close to the berry, which gives them an exceedingly clean and dainty appearance. The inner part is a very pretty red, blending to a rich cream color towards the heart. Its rich and delicate flavor makes it very popular with the high-class trade; as an all-round table berry it cannot be excelled. It also prepares nicely in many different ways for winter use.

Its high qualities and productiveness combined make it a profitable market berry, and as far as beauty is concerned, it will shine beside any variety on the list.

The foliage is a dark green, growing rather tall, and has a long narrow leaf; it is noted for the long roots which extend down deep into the lower surface of the soil; which is a valuable point in a dry season. Plants of this variety are not large, but they give extra rich returns, and this is the kind berry growers are after. Strawberry plants are like men; size does not necessarily denote ability. Our whole aim in making selections is powerfulness, not bigness.

The Bederwood has a very long blooming season, which makes it exceedingly valuable as a pollenizer for pistillates of long flowering season. The best system for growing it is in double hedge rows; this gives more foliage to protect its big load of berries from too much sun. While it will produce good crops of fruit on medium-rich soil, the returns will be enough larger, if the soil is made rich, to pay doubly for the extra expense of manure. Intensive cultural methods will bring out that rich glossy color; this is what catches the eye. Then pack the berries with stem end down, which will make them look as if they were all cleaned ready for the cream and sugar.

Nineteen years of selection and testing is what gives us so much confidence in it; also the good reports from customers that are using our strain of selected plants, which are better this year than ever.



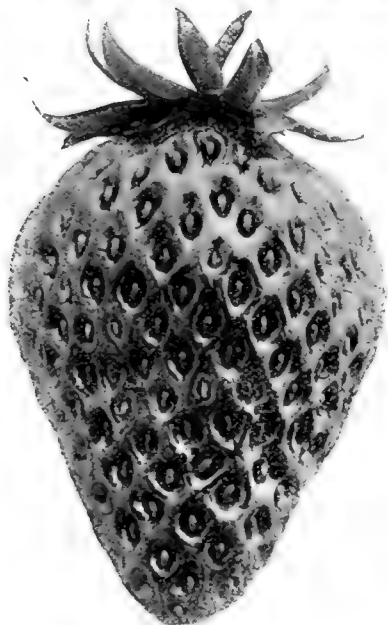
Crescent, P. (Female.)

MEDIUM EARLY. Pistillate. With medium sized crimson berries of rather broad wedge shape, tapering to a blunt point with a close-grained surface and solid flesh, which makes it a popular shipping variety. The seeds are a bright yellow, running to brown on the darker side; they stand out prominent enough to make a pretty contrast. It has a single calyx that spreads out straight and a neat, slender stem. The inner part is a rich red around the edges, blending to a lighter color towards the center, very juicy, with a flavor that might be called rather tart. It is splendid for canning and always has been a famous market berry, because it is so wonderfully productive. The berries lay in windrows and a big picking can be made every day for about three weeks.

The foliage is dark green, with an upright growth; it starts to bloom early and continues through a long season, and like all pistillates, has a small but pretty flower that is very hardy and not easily hurt by frost. It is always right on time with a great big crop of bright berries. The runners form abundantly and must be restricted to a single hedge row; it always does grandly in hills. If the plants are set about fifteen inches apart in the row and all runners kept off they will stool up to a mammoth size and will be completely covered with berries at fruiting time. When packing just lay them on their sides, allowing part of the calyx to show; we lay the top layer in rows, and it takes about three rows to cover the top. When fixed this way there are very few varieties that can beat them for beauty. We have had the Crescent under our methods of breeding by selection for twenty-one years, and the plants of this variety sent out by us have created enthusiasm wherever seen in fruit. We desire all growers to try our strain of Crescents under these methods and convince themselves that they are a profitable variety to grow.

FRRIENDS who have grown the Kellogg Thoroughbreds for years are our best advertisement. Once a customer, always a customer, is the rule, and the result is an increasing patronage as the seasons pass. In 1905 20,000,000 plants were sold; 1906 promises to do several millions better.

IF you don't know, ask about it. We'll do our best to answer, and it will afford us great pleasure, too.



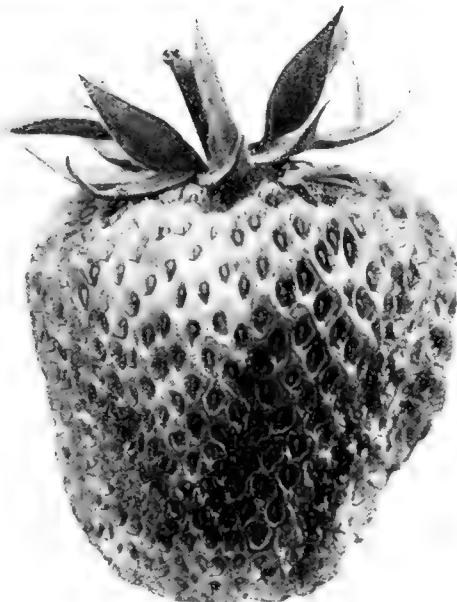
Warfield, P. (Female.)

EARLY. Pistillate. A large and most beautiful top-shaped berry, with a glossy dark-red finish that does not fade or become dull after picking; the inner part is a rich, blood red clear to center, and is exceedingly juicy, just tart enough to give it a rich, lasting flavor. As a canning berry it has no superior. The neat slender stem and green calyx join the berry in such a way as to form a slight neck, which adds greatly to its beauty and is easily removed when preparing them for use. It is a valuable shipper; firmness and handsome luster are retained for days after the berries are picked. The first berries start to ripen quite early, giving a large picking every day for several weeks; this makes it one of the most productive and profitable sorts in the list.

The foliage is a dark green with an upright habit, and our strain of plants grows quite tall and thick, preventing the hot sun from scalding the fruit after a heavy rain. Runners form abundantly and from these come many laterals. The plants never grow large in a propagating bed, but like a well-bred Jersey cow, give rich returns. The bloom is pretty and is extra hardy, seldom damaged by frost; they keep maturing and opening for several weeks, and for this reason the results will be better if it is mated on one side by an extra-early bisexual and on the other by a mid-season berry. This will furnish plenty of pollen for all the bloom, then every one will develop into a big smooth berry.

The best method for growing Warfields is in single hedge rows, layering only the best runners and allowing no laterals to take root. After a complete hedge row has been formed, treat balance of runners as weeds.

Packing Warfields is fun rather than work; the top layer should be placed directly on the stem ends which gives a complete glossy surface on top, presenting a view of beauty that is not soon forgotten. Fancy growers are anxious to sell fruit put up in this style and will pay a premium to get them. Nineteenth year of selection.

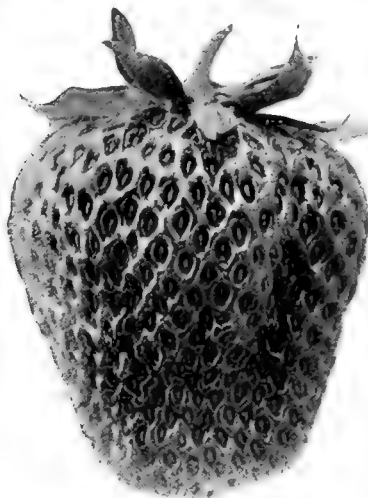


Wm. Belt, B. (Male.)

MEDIUM TO LATE. Bisexual. This is one of the great big kinds and the berries are such a bright red that they fairly glisten beneath the large foliage. There is just a little variation in form, but the one shown in the above illustration is an average type. The deep red extends to center. It is very rich and meaty, having plenty of juice to make it a desirable berry for all table purposes. The pretty yellow seeds, which lay in rows around the berry, give a sparkling effect like a dainty piece of bead work. The Calyx is rather small for such a large berry. It has an extra tall, light green foliage, with berries evenly distributed all through the vines. Its blooming season is long enough to make it an ideal pollinizer for pistillates of the same season. For extra fancy berries grow it in single hedge rows on any good soil, as it is not fastidious as to kind. The runners grow quite long before forming nodes, therefore the plants may be set thirty inches apart in the rows; it will not be long before there will be a complete line of vigorous plants. Pack the big beauties on stem end; there will be no trouble in getting the very highest price. One of our customers in Montana sent us a photograph of a quart box full of Wm. Belts packed in this manner, and they presented a beautiful appearance. We have had it in our breeding bed for ten years, selecting from the healthiest and most vigorous mother plants. We are receiving many flattering reports from our strain of Wm. Belts, but like all other good varieties, last season the demand for plants exceeded the supply. We have greatly increased our stock for this season and will be able to fill all orders without disappointment to any of our customers.

ONE Iowa grower of Thoroughbred berries writes us: "As the merchants would not pay me any more for my fine berries than they could get poor ones for, I peddled my berries from house to house and received my own price for them." That's one way to get even with a grocer who doesn't know his business.

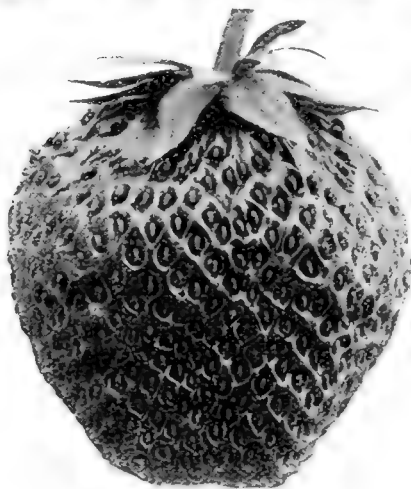
Strawberries and How To Grow Them



Lovett, B. (Male.)

EARLY. Bisexual. A rather large berry of deep crimson color. While the majority of them are conical, with long points, there are a few broad, wedge-shaped specimens, which make a beautiful appearance when nicely arranged in the box. The seeds are a bright yellow, extending well out from the surface, producing a charming effect. It is a beautiful berry when cut open, as the flesh is a rich dark red and very juicy, with enough tartness to make it a good canner. The calyx is very small, part of which lies flat on the berry, the rest curls back with stem. It stands shipping well and will hold its bright color as long as any berry we know. All these good qualities, coupled with its wonderful productiveness, make it one of the most profitable of the standard varieties. The foliage is a dark green, with a medium sized, glossy leaf; it is not a tall grower, but has plenty of foliage, which spreads out over the fruit to protect it from the hot sun; this is a point worth considering in any variety. The Lovett probably is one of the heaviest bloomers and most popular pollenizers of any variety in its season. In order to give them every advantage possible, they should be grown in double hedge rows; this will furnish plenty of plants to produce a big crop of perfectly developed berries, without any petting or extra care. The most attractive way for packing them is to place the top layer partly on their sides; this gives the most glossy effect and helps to get good prices. This makes the fourteenth year it has been under our methods of selection and we are highly pleased with its behavior. The demand for our strain of Lovetts has increased to such an extent that it was impossible for us to fill all the orders for it last season, and we have every reason to believe that there will be a heavier demand this year, and so we largely have increased our acreage.

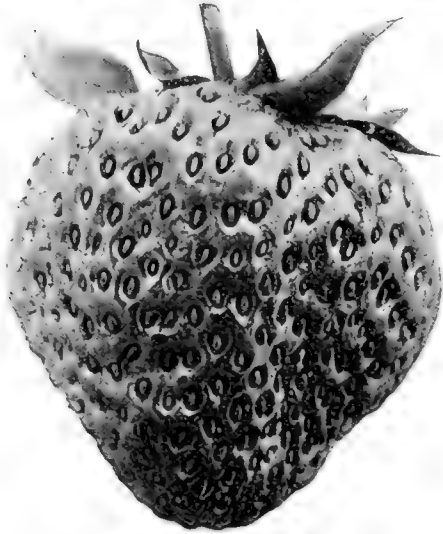
A LETTER from H. A. Todd, proprietor of the Round Hill Farm, Arago, Oregon, dated July 31, 1905, says: "I have closed a very successful year with Kellogg Thoroughbred plants. Season from May 13 to July 22." Ten weeks is a long time for one plantation to yield strawberries, but the Thoroughbreds are the ones to do it with.



Splendid, B. (Male.)

EARLY TO LATE. Bisexual. No one possibly could choose a more appropriate name for this variety, as it is surely "splendid" in every particular. It is large, nearly round, of a bright red color, a good shipper and exceedingly popular on all markets where it has been sold. Its seeds are so nearly the same color as the berry that they are scarcely visible, and thus give it a more attractive appearance. The interior is made up of two colors; around the edges a bright red which extends about one-third of the way to the center; from this point to center a creamy white. The berry is very meaty and smooth, and of melting texture. The calyx is very small, bright green and spreads well over the end of the berry. The foliage has a spreading habit, is a dark, glossy green, rather long leaf with a polished surface. The fruit stems extend in all directions through the foliage, and when berries are ripe they lie so thickly all through the row that it makes a veritable carpet of bright red and green. We have seen them lie so thick as almost to cover the mulching the full width of rows. Readers may better imagine this lovely display than we can describe it. A large number of our customers enjoy this scene of beauty right on their own grounds. It begins immediately after the bloom opens, when it is a perfect sea of white and yellow. For mating pistillates it is one of the very best, as the flowering season is long and every flower full of strong pollen. Grow them in double hedge rows; it also gives splendid results in narrow matted rows if plants are well spread out. Forty pounds of nitrate of soda to each acre, applied after growth begins, and the same amount before the buds open, will do wonders toward making a larger and thicker foliage, also toward increasing the size and color of fruit. Pack the berries on stem ends, placing top layer in rows, and we will guarantee that there will be no trouble in finding more buyers than can be supplied. We started to breed it up shortly after its first introduction, and it is now free from variations, both in fruit and foliage.

R. M. Kellogg's Great Crop of



Wolverton, B. (Male.)

EARLY. Bisexual. A large top-shaped, crimson berry of more than ordinary merit. The upper side, which is exposed to the sun, colors up quite red when fully ripe. The seeds also are darker than on the under side, where they remain a clear, bright yellow. It is one of the richest on the list and has a fine-grained flesh of pink color, being the same texture clear through; also has a very delicate, mild flavor. It has a heavy double calyx that droops over the berry, which makes them temptingly beautiful when served with stems. As an all-around table berry it has very few equals. They are so rich they fairly melt in the mouth like so much chocolate candy. This is why it is seen in so many family gardens. It is also a big money maker for the grower who sells direct to consumers, as its richness overcomes any objection to price.

The foliage is large with a spreading habit, has a broad, light green leaf and heavy fruit stems. The bloom is large, well developed and so full of rich pollen that it is ideal for mating purposes. Grow it in double hedge rows on medium rich soil; cultivate until late in the fall to force a thick foliage, then mulch quite heavily, as the berries lie close to the ground and the material used for this will keep them clean. The difference in price will doubly pay for all extra care. When packing them we would suggest that the top layer be placed on their sides, allowing some of the calyx tips to show. A little time spent in arranging fruit to make it look dainty always is profitable.

This makes the sixteenth year it has been bred up by selection and restriction, and that is why we can so confidently recommend it.

GROWERS of the Kellogg plants appreciate them. Thos. E. Sutton of Marion, Iowa, writes us under date of July 24, 1905: "The 3,000 plants I bought of you in the spring arrived in good condition, and I now realize the great value of Thoroughbred plant breeding. They show their business qualifications by building up crowns, and Oh! such foliage! notwithstanding the season has been so wet and my ground so low I could not handle them as I should have done."



Haverland, P. (Female.)

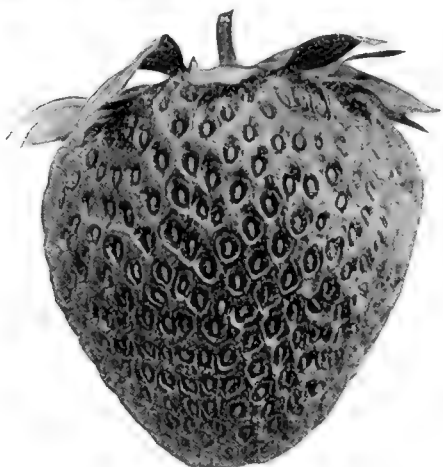
MEDIUM. Pistillate. A large and long berry of bright crimson, blended with light red on one side, rather full and round at the stem end, gradually tapering to a point; the seeds are a bright yellow and just prominent enough to make a handsome appearance; the calyx falls gracefully over the berry, which adds beauty as well as protection in shipping. The inner part is a rich pink, solid meat, quite juicy and with mild flavor. It is the berry of all berries for productiveness, and for this reason is extensively grown all over the country; there is big money in growing such a grand variety as Haverland.

The foliage is rather tall, of spreading habit, with a long dark leaf, sends out large, stocky runners and makes strong vigorous plants. The bloom is medium-sized and extremely hardy, seldom hurt by frost. The Haverland should be grown in double hedge rows on medium rich soil, with plenty of cultivation and hoeing to stimulate a large foliage growth; they should be well mulched, as the fruit stems are not able to hold the immense load of berries from the ground, and the straw will keep them clean; this also makes easy and quick work at picking time; the big, bright fellows lie in windrows piled on top of each other.

The most catchy way of packing the fruit is to lay the top layer in rows on their sides; this gives them a most tempting appearance and makes it easy to get a big fancy price. We find the style of packing has as much to do with quick sales and big prices as the berry itself. Just try this plan and see if your fruit does not attract greater attention. Fancy grocers and commission merchants are hunting for growers of this kind.

Remember we have been breeding up the Haverland for sixteen years, sparing neither pains or expense in making our selections from high scoring mother plants, and we now have it quite up to our ideal. The demand is increasing for our strain of Haverlands every year; last season it required one and one-half million of them to fill our orders.

Strawberries and How To Grow Them



Lady Thompson, B. (Male.)

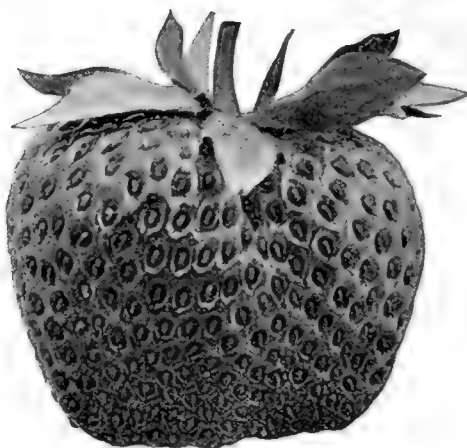
EARLY TO LATE. Bisexual. A medium large bright red berry, shaped almost like a top, but does not run to a point; it is just a little blunt, which makes it all the more beautiful. The seeds are laid in very smoothly, which gives a glossy effect; it has a double calyx that opens gracefully over the berry; the inner part is solid and meaty, with an exceedingly rich flavor and pink color. It is a splendid shipper, always getting to market in good salable condition; this is what makes it so popular in the South.

The foliage is an extra tall, upright grower, with a long light green leaf, also extra long fruit stems which stand erect, holding their big berries well up from the ground. It is a deep rooter and keeps right on growing through a drouth. Runners are long and abundant. For this reason it should be grown in double hedge rows; this method will give larger berries and more bushels than if allowed to mat up thickly; they also will be of better color. Soil only medium rich will produce a good paying crop, and with a little care in packing, by placing the top layer on stem ends, they are just as pretty as pretty can be.

Every year in making our selections we find this berry gaining in good points, so good that we were unable to fill all the orders that came to us for our strain of Lady Thompsons last year, but we are ready with a big stock this season.

When this variety was first introduced it was principally grown in the South, but of late years we are having big calls for it from many sections of the country, and its popularity steadily increases as its virtues become more widely known.

ONE of our patrons who combines Thoroughbred Pedigree strawberry growing with high-class poultry raising is A. C. LeDuc of Chenoa, Ill. He writes under date of July 27, 1905: "From the one-half acre of strawberry plants I bought of you I gathered about eighty 24-quart cases. The quality was the best ever brought to this city, and when I commenced to deliver my berries to two grocers here, it put all the other grocers out of the berry business, for they could sell nothing but LeDuc's berries. The 3,500 plants I bought of you last spring are looking finely."



Bismarck, B. (Male.)

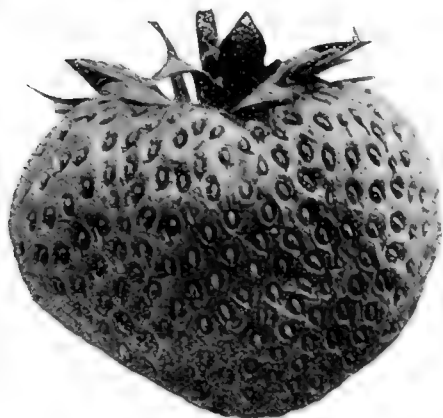
LATE. Bisexual. A medium-sized, light red berry of very delicate flavor; one of the best table berries on the list; the inner part is a deep pink, extra rich and meaty. It has bright yellow seeds which stand out prominently. For size and shape, see picture. It is very productive; in this respect it will equal any variety of its season; the berries hold up well in shipping. The foliage is of a spreading nature, has a dark green, waxy leaf, very much resembling Bubach. It has a large perfect bloom and is an ideal pollinizer. The soil should be made quite rich. Set the plants two feet apart and let them form a double hedge row. Fifty bushels of wood ashes to each acre will brighten up the color and enrich the flavor. If the fruit is grown for market, place in rows with stem ends down. This is the twelfth year our strain of these plants has been bred from ideal fruiters, so you may rely on their merits.



A Substantial Packing House

HERE is shown a substantial berry packing house. In such a building as this crates and boxes can be made up during the winter months when the weather will not permit working out of doors. It will be seen that the teams drive in the shed part of the building to load the berries, a valuable feature during storms.

R. M. Kellogg's Great Crop of



Ridgeway, B. (Male.)

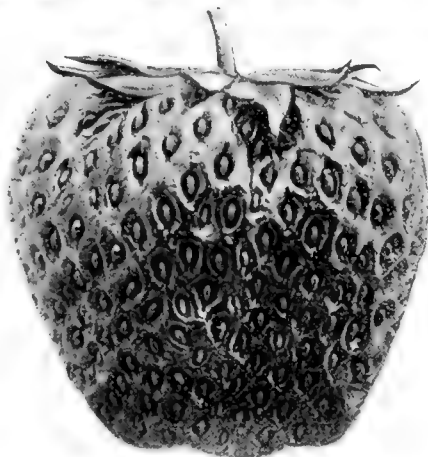
MEDIUM EARLY TO LATE. Bisexual. The Ridgeway is large, rich, blood red, round as a cherry and almost as smooth; the seeds are embedded in the flesh just enough to make a smooth surface, a combination certainly that makes it a handsome berry, and its beauty is not affected when cut open, as the interior is just as fine as the exterior. The meat is a pure scarlet, with an oblong ring around the heart that is almost white. If the berry is cut in two lengthwise, this white ring is oblong, but if cut crosswise, it is perfectly round. The calyx is small and droops over the berry, remaining green for several days after being picked.

Ridgeway does not depend on its beauty and quality alone for popularity; its productiveness also helps to make it famous. The foliage is a tall grower, with dark green leaves that are so waxy they fairly glisten; the runners are extra large and grow long before forming nodes for their new plants, and if allowed to grow at will they take root about fifteen inches from the mother plant. For this reason it is well to set the plants about three feet apart in the row, allow each one to make four runners, and each of these can make two plants, which make eight from each mother plant; layering these along the row in two lines will form a complete double hedge row, with the plants about ten inches apart. This allows plenty of room for them to stool and get ready for heavy work at fruiting time. Make the soil rich with manure; fifty bushels of unleached wood ashes to the acre will add much to the firmness. Both manure and ashes should be thoroughly incorporated with the soil before plants are set. Cultivate until late in the fall, as they will pay big for all the extra expense of labor and fertilizers.

When packing do not crowd them; they make a most beautiful appearance when packed with stems down and always are a favorite with the fancy trade, which wants the best and is determined to have it, no matter what the price may be.

This makes the ninth year we have had the Ridgeway under our method of selection, and our strain of plants is making friends wherever tested.

EVERY berry grower should set his standard high; then never rest until it is realized. "I will pay big.



Aroma, B. (Male.)

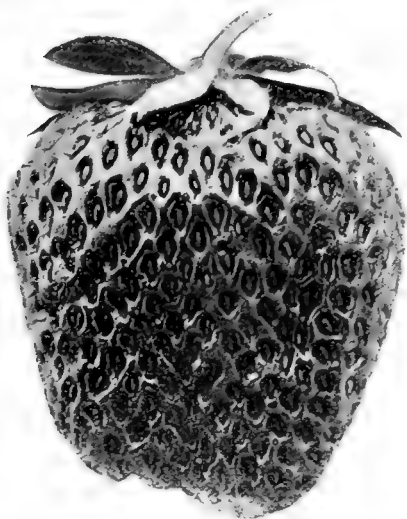
LATE. Bisexual. One of the very best late varieties. The berries are very large and blood-red to center; it has a rich, aromatic flavor peculiar to itself. The flesh is solid and very smooth; it seems to absorb the juice, preventing it from running when cut open. The outside also is very firm, thus making it an ideal shipper. Part of the calyx droops over the berry and part curls back towards the stem. It has yellow seeds, which are very prominent and glossy. Its productiveness, firmness and rich flavor have made it one of the most popular varieties among commercial growers, and it is the leading late berry in many localities. As a pollenizer for late pistillates it has no superior, as the bloom starts to open medium early and continues until quite late. The foliage is a smooth deep green, with spreading habit, giving the sun a good chance to beat upon the crowns; its leaves are quite long and free from all fungus effect. It is a sight worth seeing at fruiting time, as the bright, clean foliage, drooping over the big load of dark red berries, makes a shiny streak across the field which never appears commonplace to the lover of the beautiful in nature.

Set the plants thirty inches apart in the row and lay the runners so they will form a narrow matted row; this will give better results than any other system we have tried; but do not allow them to mat thickly; let each row get about one foot wide, with six or eight inches of space between the plants. Do not omit mulching, as their fruit grows close to the ground. Pack the berries with stem end down, letting only the bright tips show.

This is the fourteenth year of selection and restriction, and it is now good enough for anybody. From the flattering reports received from all parts of the country we are convinced that it will succeed everywhere.

I SET twelve rows of Thoroughbred Haverlands and six of Bismarcks, using the latter for fertilizers. These rows are just about four rods long and there are eighteen of them—not a very large patch. But this season we picked more than 1,000 quarts from it. The conditions were most unfavorable, and under the circumstances I think this an exceptional yield," writes B. Griffiths of Estherville, Iowa.

Strawberries and How To Grow Them

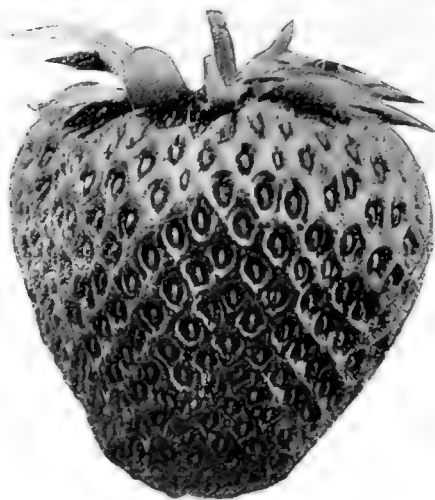


Glenn Mary, B. (Male.)

MEDIUM. Bisexual. Just look at the picture and see what large berries can be grown on Thoroughbred plants. They are all big, dark red beauties, with prominent seeds of bright yellow; the meat is crimson, very rich and juicy; they are of such high flavor that a taste of them fairly makes the mouth water. The calyx is quite curly and extends in all directions; it is splendid for canning, preserving, or for any other way that a strawberry can be put up for future use. As a good, firm shipper, it equals the best. For this reason it is a great pet among large growers who depend on shipping their fruit a long distance. We get so many good reports on Glenn Mary that we should be astonished to hear of even a partial failure.

It has no particular choice of soils and doesn't require any petting; the roots are long and will bring up plenty of moisture for the plants during a drouth. The foliage is extra large, upright grower, and of dark green color; the leaves are nearly round, with glossy surface, making a beautiful appearance in the field. Although the fruit stems are strong and heavy, the great clusters of berries weigh them down to the ground; therefore, they should be well mulched to keep them clean. When growing Glenn Marys for fruit set the plants thirty inches apart in the rows and layer the runners so as to form a double hedge row, spreading them well out so they will not crowd each other. During our extensive experimenting with this variety we have discovered that it is not a strong pollenizer, and better results will be obtained by mating it with some other bisexual of the same season; every fourth row will be enough. Use manure moderately; too much will make the berries irregular in shape. Cultivation should be discontinued early in the fall to give the fruit buds a good chance to develop.

The berries are just the right shape to make a fine appearance when placed with stems down. You need not be timid in asking a big price; everybody is willing to pay extra to get such fine berries. This makes the ninth year we have been working on Glenn Mary in the breeding bed, and our strain of plants has made an unequalled record. Just try them under these methods and note results.



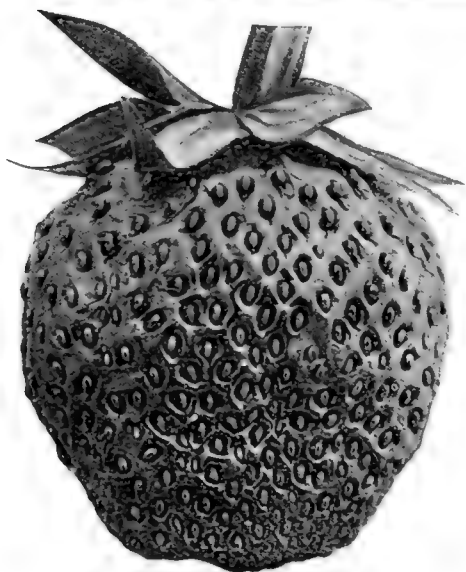
Senator Dunlap, B. (Male.)

MEDIUM TO LATE. Bisexual and a record-breaker, sure enough. It is certainly a most wonderful producer of large and handsome top-shaped berries of rich dark red with a glossy finish, shading to a deep scarlet on the under side, with prominent, bright yellow seeds that look like gold embedded in highly colored wax; they are so uniform in shape and size that they will bring a fancy price without much sorting. The inner part is a bright red, with meat of a delicate melting texture and exceedingly juicy.

It has a heavy, green calyx, part of which droops over the berry and part curls back towards the stem, which is very long. This not only protects the berries in shipping, but adds much to their beauty, making them more tempting to purchasers. It is unsurpassed for canning as well as a delicious table berry. In fact, Senator Dunlap is an ideal berry any way you fix it. As a heavy fruiter of strictly fancy fruit it cannot be outdone; if it has any bad faults they fail to materialize on our grounds.

The foliage is tall, dark green, upright, with a long leaf; it has more than ordinary power for developing a big heavy crown system; it is a common thing to find hills with fifteen and eighteen crowns. It has an extra long flowering season; the bloom is handsome and exceedingly rich in pollen, which makes it very valuable to set by such pistillate varieties as are in its season. Another redeeming feature is its long roots, which go down to the subsoil for moisture. A drouth never seems to check it either in vegetative or fruit production; the foliage always is large enough to protect its bloom against light frost; it is a vigorous plant maker and should be restricted to single hedge rows, so the plants will have plenty of room to do their heavy work. They thrive on all soils and will stand neglect, so they will respond liberally to good care. The Senator pays big dividends on money invested for manure and labor.

In packing them, place the top layer on their sides so as to allow part of the green calyx to show; this makes a striking contrast and attracts attention. Goods well shown are half sold, and especially is this true with strawberries. It is really difficult to describe all the good points of such a remarkable berry as the Senator Dunlap. This is the eighth year we have been selecting it in the breeding bed with utmost care, and every year shows it better. Last season it took more than one million of these plants to fill our orders.



Parson's Beauty, B. (Male.)

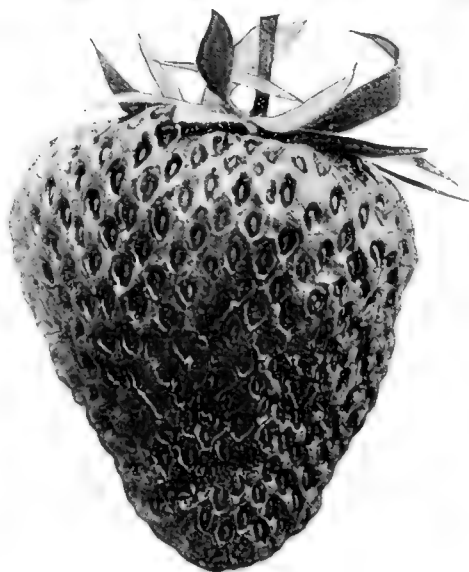
MEDIUM. Bisexual. A remarkable producer of bright red berries, the interior of which is a trifle lighter in color than the outer surface; it is an exceedingly rich, meaty berry and very juicy; has a mild flavor, which is retained after being cooked; there are very few varieties that equal it for canning. It has the most prominent seeds of any berry we ever have seen; they are not embedded into the flesh as is the case with most berries, but extend out beyond the surface and give a most beautiful effect; the bright yellow with a dark red background makes such a striking contrast that it is sure to attract attention. They have a rather bushy calyx and heavy stem; for size and shape see illustration; the camera has shown this truer and much better than we could describe it.

The foliage is an upright grower with a rather long, dark green and leathery leaf. It is one of the best pollenizers of its season, the bloom being extra large and exceedingly rich in pollen. The plants make long runners and will be more easily controlled in the fruiting bed if set thirty inches apart in the row; they will soon form a complete single hedge system, which is the most satisfactory way to grow Parson's Beauty.

Medium rich soil is best; too much manure has a tendency to develop more foliage than is necessary. It is not particular as to locality; we have tested it thoroughly with splendid results. In packing the berries, place the top layer on their sides so as to show the broadest part of them. We have had it under our methods of selection for four years, and it is making a splendid record. You will make no mistake in setting largely of our strain of Parson's Beauty.

Thoroughbreds Succeeded Despite Nature's Frown

AUGUST MELCHER of Stockholm, Wisconsin, writing the Kellogg Co. under date of August 5, 1905; says: "We had a very varying season from the time the blossoms opened until the close of the fruiting season. I got a big crop despite the unfavorable weather, and I am sure that if I had not had such strong fruiting plants the crop would hardly have been worth looking at."



Downing's Bride, P. (Female).

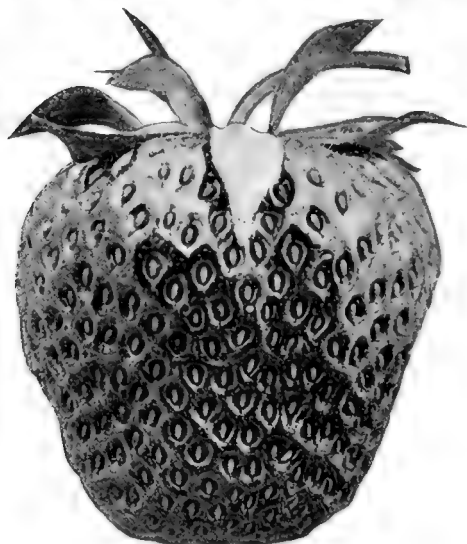
MEDIUM TO LATE. Pistillate. One of the very prettiest and glossiest berries we ever have seen; they are dark blood red almost to center; just enough white at the heart to make it look more tempting and rich; the seeds are of a golden color and shine as if polished. The above photograph shows size and shape. The big shiny fellows lie in piles all along the rows; very few varieties excel Downing's Bride in productiveness. At fruiting time it is a sight worth going miles to see. The foliage will compare in beauty with the berry. It grows tall, has a large leathery, dark green leaf, which droops over and shades the berries from the sun's direct rays, preventing them from being scalded after a rain. They will remain on the vine in good condition for several days after thoroughly ripe; they also keep a long time after being picked. Runners form abundantly and grow about fifteen inches long before making plants.

In preparing soil for this variety, work in plenty of manure. We have tested them on clay, sandy and creek-bottom soil with no difference appearing in their behavior. Productiveness and quality on all soils and in all localities is their strong claim. Set the plants three feet apart in the row and train them in the double hedge system; this will allow plenty of room in center of row in which the berries may spread out.

As the berries have such a pretty green calyx, they should be packed so a part of it will show; when arranged in this manner it adds so much to the appearance that two or three cents more on the quart will not be objected to by lovers of something extra fancy. It certainly does not pay to pack such handsome berries as Downing's Bride carelessly; no one can realize what a great difference a little time in arranging the top layer of each box will make until they try it, and those who practice it always are top-notchers on the market.

We have been working on Downing's Bride in our breeding bed for four years, and have tested it so thoroughly that we now can recommend it to our friends for either the market or home garden.

Strawberries and How To Grow Them



Klondyke, B. (Male.)

MEDIUM. Bisexual. Just take a good long look at the illustration and note the beautiful uniform shape of the Klondyke. Its color is a rich, blood red, which extends through the entire berry. It is neither sweet nor sour, but has a very mild flavor peculiar to itself and also is quite juicy. The calyx is small, curling back towards the stem. Southern growers have become so enthusiastic over it that they now are setting more largely of it than of any other variety, and in some localities are growing them exclusively. One Texas grower cleared \$500 from one acre. He undoubtedly is convinced there is gold in the Klondyke. Chicago commission merchants tell us that Klondyke is a great favorite in that market, because it always arrives in good condition, retaining its form and bright color longer than most varieties do after being shipped a long distance. These are points that should be considered by all commercial growers. Its extraordinary productiveness is another feature that is bringing it rapidly to the front rank.

The foliage is light green, tall and compact, with medium sized leaves; runners form abundantly and set their plants closely, thus preventing them from growing to a large size in the propagating bed, but when restricted to single or double hedge rows, they grow large and develop as many crowns as any variety we have. We get best results from the double hedge system, as the berries grow just as large, and there are many more of them than can be grown in the single hedge.

For high price, pack the berries with stems down, thus showing only the glossy ends. This is the fourth year we have had it in the breeding bed under our methods of selection; we also have tested its fruiting ability on different soils, and it proves to be a money-maker wherever tested. It will pay to set largely of our strain of Klondykes.

FROM Geo. W. J. Bates of Vassar, Mich., comes word that from twenty-four square rods he sold 704 quarts of berries in 1905, realizing \$49.66. They were sold at the rate of \$2 to \$2.50 a bushel. Of course they were Thoroughbreds.



Miller, B. (Male.)

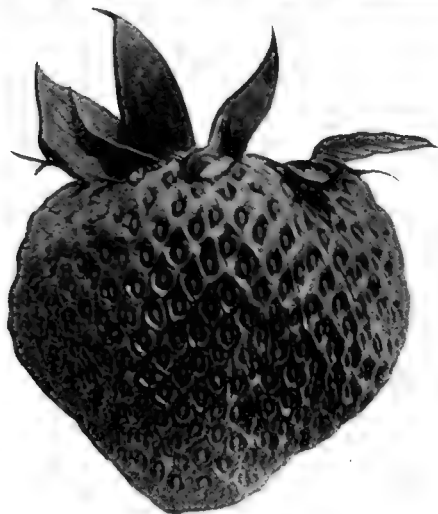
MEDIUM TO LATE. Bisexual. One of the very best varieties for family gardens of its season. Just look at the picture and see what large round berries they are; if the dark red color could also be shown it would take your eye for sure, and when it comes to flavor, they will compare with the very best. The interior is of a smooth, melting texture, exceedingly rich, juicy and sweet; good enough without cream or sugar. Its productiveness and richness make it ideal for home use and family trade, but it is too delicate for shipping. The foliage easily is distinguished from all others; it is a light green, grows very tall and has extra-large, coarse leaves. It is not particular as to soils, but seems to succeed everywhere. Set the plants thirty inches apart and layer the runners in a straight line, to form the single hedge row. This is the fifth year we have had it under selection and restriction. Our strain of Miller plants is without an equal. Everyone ordering for home use should include them in the selection.

The Advance No. 1 Wire Stapling Machine.



WE call attention to the Advance No. 1 Wire Stapling Machine as a simple, reliable, and moderate priced article. It is substantially built of the best material and by the highest class of mechanics. All the screws, studs, etc., are made of steel, extra large and strong. Castings of best gray iron. Wearing parts of best grade tool steel where it is needed. All parts subject to wear can be duplicated. This machine is built for belt power, when wanted, and is fitted with friction clutch and pulley. We guarantee the machine against faulty material or workmanship, and will gladly replace any part that proves defective up to one year from date of sale. Price, \$25.00 f. o. b. St. Joseph, Mich.

R. M. Kellogg's Great Crop of



Monitor, B. (Male.)

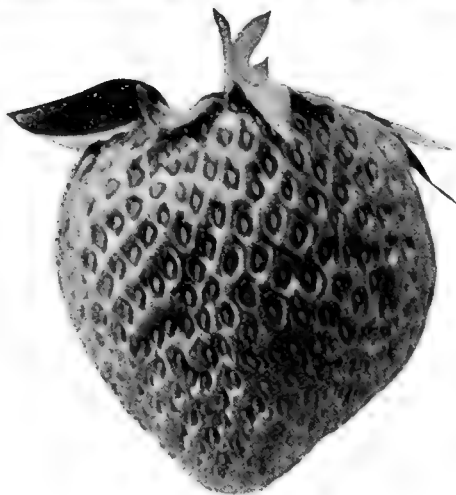
MEDIUM TO LATE. Bisexual. An extra large, cone-shaped, scarlet berry with red and yellow seeds mingled together; it has an uncommonly large green and rather bushy calyx; the stem also is larger than ordinary. The inner part is medium, coarse grained, of real light cream color and a rich flavor of its own; in fact, the entire berry is different from any other we ever have seen; it certainly is one of the very best for family gardens and home trade. We cannot recommend it as a good shipper. Growers who market their berries from house to house and sell to local stores will find it one of the most profitable on our list; its large size, handsome appearance and rich, mild flavor always will command the very highest price.

The foliage is tall and upright, with a dark green and almost round leaf. The bloom is medium large and so abundant that it covers the entire foliage; in this respect it has but few equals, and in a very short time every bloom has been transformed into a big scarlet berry; then it truly is a grand sight. In order to get the largest possible yield they should be grown in double hedge rows on rather rich soil. Sow fifty bushels of wood ashes broadcast to each acre; this will furnish potash in sufficient quantity to add more firmness; it also will make them higher in color and richer in flavor.

Just pack the top layer with stem-ends down, and it will be no trouble to make quick sales at big prices. This is the seventh year of selection in the breeding bed, and we take pleasure in recommending them for near market and family use.

4,800 Quarts From 3,300 Plants.

THIS splendid record was made by Lewis Smith, of Springfield, Illinois, Rural Route No. 2, who writes us under date of February 10, 1905: "If testimonials are in order here is one: In the spring of 1902 R. M. Kellogg sent me 3,300 plants, and in the spring of 1904 I gathered from them, 4,800 quarts of berries." There is no trouble to get these big yields when you have Thoroughbred plants to work with. Give these the soil and cultivation they deserve; they'll do the rest.



Kansas, P. (Female.)

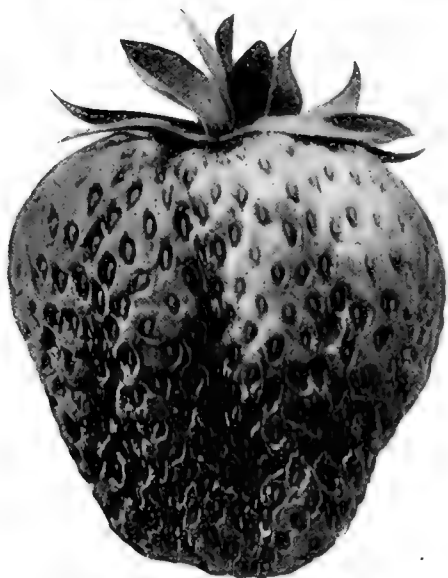
MEDIUM. Pistillate. It has an extra-hardy bloom and is very productive of high-quality berries, which are dark red clear through; this is just about the reddest berry we ever saw. They are medium to large and quite firm. The seeds are fully as dark as the berry and are scarcely noticeable. The foliage is a light green, upright grower. It makes plants in abundance; they do not grow large in the propagating bed, but will stool up wonderfully if grown in single hedge row. Set the plants thirty inches apart and they soon will make the required number of runners to form the single hedge. Such a dark red berry as this will look better packed with stems down. We are now taking it through the ninth year of selection. Although the Kansas is a splendid berry it never has become so popular as other varieties of its season.



An Inexpensive Packing Shed.

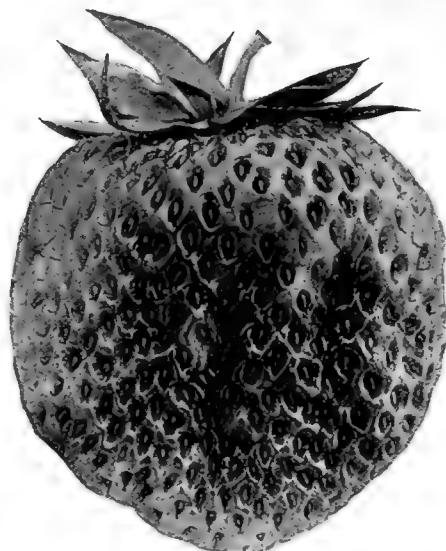
IF you haven't the time or don't care to go to the expense of building a more substantial house for packing the berries, you can at least erect a light shed as shown here, and it will do excellent service. Don't try to get along without some covering during packing if you would keep your berries in the best condition.

Strawberries and How To Grow Them



New York, B. (Male.)

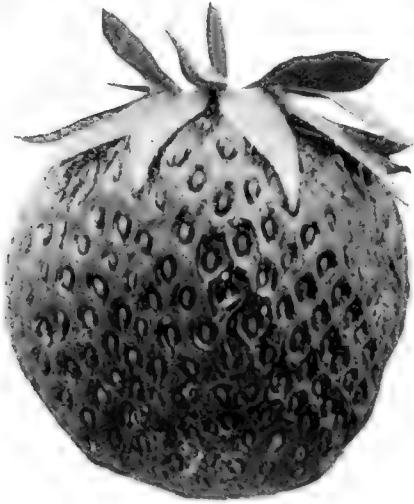
MEDIUM TO LATE. Bisexual. This one surely belongs to the Jumbo class, both in foliage and fruit. The berry is extremely large; some are top-shaped with a rather long point, while others are thick and broad. Their color is a blood red with a shiny surface; the seeds are so nearly the same color as the berry and so deeply seated that they are scarcely discernible. Where seeds are embedded in this manner it gives an appearance of shallow indentures made in highly colored wax. The interior is very meaty, of smooth texture, with a mild, delicate flavor. It is strictly a fancy berry and a prize-winner, just the kind to make the grower famous, because such a high-class berry always wins high-class trade. Small, inferior berries have no show beside New York, no matter how cheap they are. It is very prolific and has a long season of ripening, but it does not matter how fast they ripen; there are always more eager buyers than can be supplied. Its excellent quality and wonderful productiveness make it a most profitable variety to grow, either for shipping or home trade. The calyx is very large and stands out prominently. The foliage is a light green and a luxuriant grower, with an extra large glossy surfaced leaf. It is of upright habit, furnishing plenty of protection for its big load of berries; its bloom is unusually large and furnishes an abundance of pollen. We have tested New York on different grade soils and it always shows up finely. It does best in single hedge-rows on good rich soil; it also is a money-maker when grown in hills. In packing such a large berry as this it always is best to place the top layer in rows on their sides; this makes a very tempting package. The plants from this variety have been selected in our breeding bed six years. Last season the orders for our strain of New Yorks far exceeded the supply, and we know there will be a larger call for them this year than ever. We are prepared for the rush with the best developed plants that ever were grown.



Challenge, B. (Male.)

MEDIUM. Bisexual. This is a fine variety to grow for family trade; the berries are extra large, not so smooth and uniform as some, but the size, color and rich flavor will make customers beg for them at almost any price; the majority of them are corrugated like the one shown in picture; they are dark red, with bronze colored seeds, which gives the berry a polished effect. The flesh is a deep crimson, very solid and rich. We have tested it in many ways on different soils, and it seems to be at home everywhere. It is not only valuable for home trade, but is a good shipper as well. The foliage is large, light green, and spreads out well to give every berry a chance to develop to full size. It is a pretty sight to look down through the vines and see the big red berries lying so thick as to touch each other. It safely can challenge any variety in productiveness, as there are very few that can out-do it when grown in double hedge-rows. Set the plants twenty-four inches apart and spread the runners so as to make a wide double hedge; this will give plenty of room for air and sunlight in the center of the row. It makes a trifle more hoeing, but this is paid for at fruiting time. Cultivate until late in the fall, then mulch with stable manure, putting only the coarsest directly over the plants and the decayed matter between the rows; the leachings of the manure will stimulate a larger foliage as well as increase the size and amount of fruit. If manure can not be bought at a reasonable price, use forty pounds of nitrate of soda to each acre as soon as growth starts in the spring; repeat this just before they bloom. It should be scattered over the row just before a rain and while the foliage is yet dry. These two applications will cost about \$2.50 per acre, but it will add ten times that sum to the value of the crop. This style of berry will be made more attractive by placing the top layer on their sides. Our books show the fourth year of selection for Challenge.

R-M Kellogg's Great Crop of



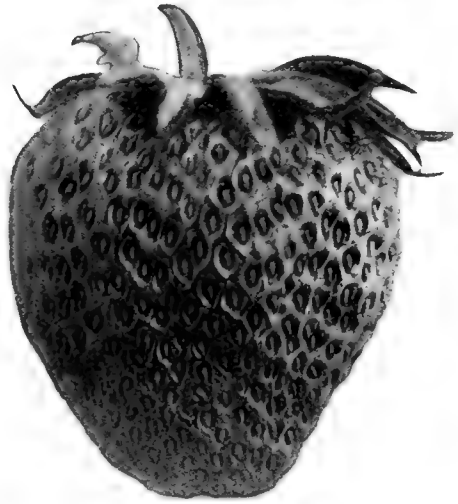
Nick Ohmer, B. (Male.)

MEDIUM TO LATE. Bisexual. This is another variety that belongs to the rich-flavored class. The berries are large, cone-shaped, very firm, with a beautiful crimson color, which shades to pink at the center. The majority of the seeds are brown, with a few yellow ones dotted here and there, making a very pleasing combination of color; then comes the pretty green calyx to contribute its share of attractiveness. Nick Ohmer never has to go begging for purchasers, but is always bought at sight; they are firm and can be shipped a long distance and will keep on the vines or in the box for several days after ripening; but they won't get a chance to keep if put where people can see them.

Their foliage easily is distinguished from all others, as it grows tall, has a large dark green leaf, which cups or crinkles enough to give them a thick leathery appearance. The fruit stems are long and extend up through the foliage, thus making easy work at picking time. The bloom is large and rich enough in pollen to make every berry perfect. Their runners grow long before forming nodes, therefore plants can be set thirty-six inches apart in the row; then by letting each one make four more plants, a single hedge row will be formed without crowding them.

Do not cultivate later in the fall than absolutely is necessary to keep down weeds; this will check the vegetative growth and give fruit buds a chance to develop more abundantly; and remember that a little manure well incorporated into the soil, will give better results than a heavy dressing.

Do not omit the finishing touch in packing. Place the top layer on stem ends, and a few of the big leaves placed on top of each crate will give them a fancier appearance. Nick Ohmer has been bred up eight years in our breeding bed, with selections made from mother plants showing highest points of excellence.

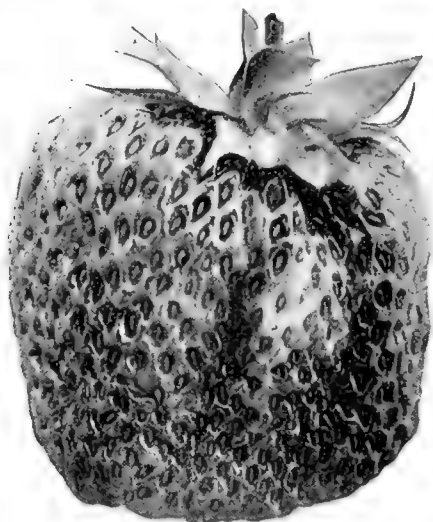


New Home, B. (Male.)

VERY LATE. Bisexual. The berries are extra large, bright red, holding their color for several days after being picked; their firmness and keeping qualities are sure to make it one of the most profitable late varieties. The seeds are brown and yellow with plenty of gloss, giving the berries a polished appearance. The flesh is a beautiful deep pink and very rich in flavor. It is said to be exceedingly productive, and the way they build up crowns and stool out, convinces us that this is a true statement. It is a new variety and we never have fruited it except on a few spring-set plants to test the quality. One of the largest growers in Maryland claims that it is one of the best late varieties on his farm, and that his seven-year-old boy picked thirty-seven quarts of New Homes in two hours. We consider him a truthful man, and from the way it behaves on our grounds are led to believe the New Home is destined to be a favorite.

The foliage is light green and makes good thrifty plants for us; it shows up best in double hedge rows and this is the way we recommend it to be grown. Thirty inches apart will be close enough to set the plants. As this is its first year in our breeding bed, we can claim nothing more for the plants than that they have been thoroughly sprayed, the same as all other varieties on our farm, and are perfectly free from insects and fungi. The plants are strong and vigorous; we are more than pleased with their behavior and feel confident that we have added a splendid late variety to our list. Nothing could please us better than to have our friends give them a trial and report. In the mean time we shall take them through some severe testing in our experimental bed. You may rest assured we would not recommend it in any way if we did not have good proof of its value. Be sure and give it a liberal trial, but do not set largely of it until we have a chance to test it more fully. There is only one way to determine the real value of a new berry, and that is to test it on your own ground; this is what we want you to do with New Home.

Strawberries and How To Grow Them



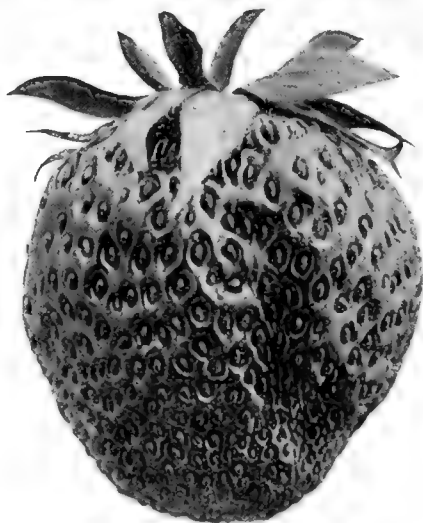
Enormous, P. (Female.)

MEDIUM TO LATE. Pistillate. It is all its name implies, as it is enormous, both in size and productiveness; the berries are rather broad, wedge-shaped, and of good quality; it has a pretty crimson-colored surface with dark yellow seeds; the calyx is light green and lies flat on the berry; the stem remains a bright green after the berries are picked. This helps to retain a fresh appearance in the fruit. The inner part of the berry is deep pink; it is mild in flavor and quite juicy; it is a splendid variety to grow for family trade, as its large size and richness helps to get new customers, and old ones will keep buying without coaxing.

The foliage is very large, with a broad, nearly round, light green leaf and short heavy fruit stems, but not strong enough to hold their big load of berries off the ground; they must be mulched to keep them clean. Grow them in double hedge rows on any soil that is rich enough to produce a good crop of corn or potatoes, give plenty of cultivation and you will be well paid at fruiting time. It is now going through the eleventh year of selection and restriction; therefore, we are not afraid to stand by it.

The demand for Enormous is increasing every year, and we find it difficult to grow enough of them, but our stock of plants is larger and finer than ever this year, and we feel confident that all orders can be filled without disappointment to anyone.

PROF. WILLET M. HAYES, Assistant Secretary of the Department of Agriculture, who has done so much to improve and increase the yield of wheat by breeding, recently said in an address that the fruit production of this country is about \$15,000,000 per year, and that this yield could be increased 10 per cent with not more than 1 per cent increase in expense, if the proper effort is made. It is along the line of economic production that the fruit grower should work. It means more and better fruit, produced at less cost; and these result in greater satisfaction alike to producer and consumer.



President, P. (Female.)

VERY LATE. Pistillate. Just cast your eye on the picture, which is a perfect likeness of our strawberry President. We would not dare show its beautiful colors of mottled pink and red, which extend entirely through the berry, lest our stock of plants should prove inadequate to the demand. No one who sees the fruit but admires and wants it. The berries are large red, almost round; every one of them has a dimpled end, which well compares with a dimple in a pretty girl's chin. It has the smallest calyx we have seen on such a large berry. The seeds are brown and yellow and give a pretty, sparkling effect to the berry. It is very rich and meaty, just the kind to serve with stems, or in any other dainty and attractive manner to which the strawberry is peculiarly adapted. It is surely a valuable variety to grow for late market. Its productiveness, bigness and rich flavor has made it a favorite wherever grown. No trouble to find buyers for such fancy berries as President. Do not be backward in naming a good price; the grower of choice fruit is worthy of a fair profit as well as fame.

The President makes a very large foliage of light green; its bloom is larger than is generally seen on pistillates. It is a variety easily controlled in the fruiting bed, as its runners do not form abundantly. If the plants are set thirty inches apart in the row, it will be a small job to keep the runners off after the double hedge row has been formed; and this is the most profitable way to grow them. Give the soil a good dressing of manure; the increase in berries will pay the bill.

Pack the top layer of berries with stems down, showing only the end with the big dimple and they will make a show worth seeing. This is the third year of selection, watching all points closely, and the good ones are many. Our strain of plants has created much interest among our patrons as well as on our own grounds.

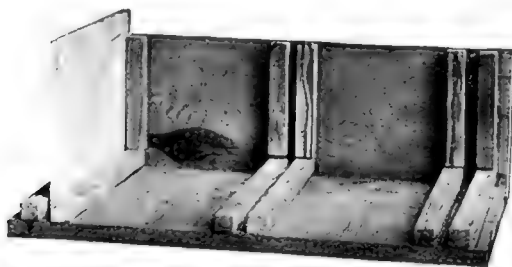
I AM glad to say," writes Mason Hamilton of Carlisle, Ky., "that the plants I got from you bore remarkably well. I counted 124 berries on one plant."

R-M-Kellogg's Great Crop of



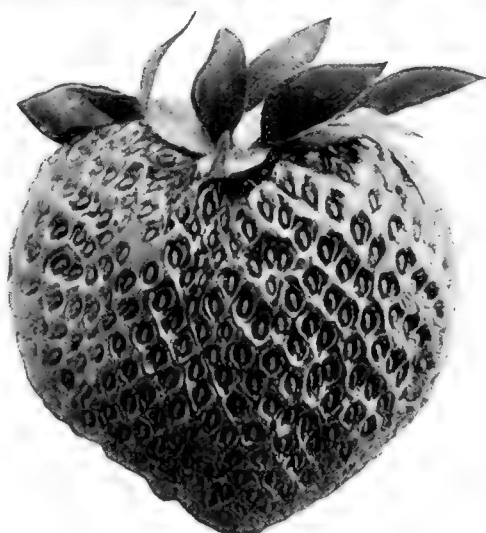
Clark's Seedling, B. (Male.)

MEDIUM EARLY. Bisexual. One of the leading varieties on the Pacific coast. It is deep red to center, quite large and of beautiful form as shown in picture. It is a splendid canner and shipper; also very productive. The foliage is medium large, dark green and makes lots of runners. Set the plants thirty inches apart in the row and spread the runners so as to make a wide, double hedge; that is, give plenty of room in the center of the row, so each plant will have room to spread its foliage. Any berry of this shape will show off better if placed with stems down. This is the first year we have had them in our breeding bed, and they are showing up grandly. Clark's Seedling always brings good prices wherever they are grown, and we should like to have our customers add a few of these plants to their order.



Crate Form and How to Make It.

TAKE a plank two inches thick, sixteen to twenty inches wide, and two feet long. Nail a six inch board to the back of this, then put on one-inch strips to form the slots, as shown in the picture, and the job is done. These slots hold the ends and center pieces of crates into their places while the sides are being nailed on. One end of crate is shown in slot. With a form like this, crate making is an easy task quickly done. One man easily can make 150 crates per day. It is such conveniences as these that make it possible for the strawberry grower to conduct his business with economy and dispatch.

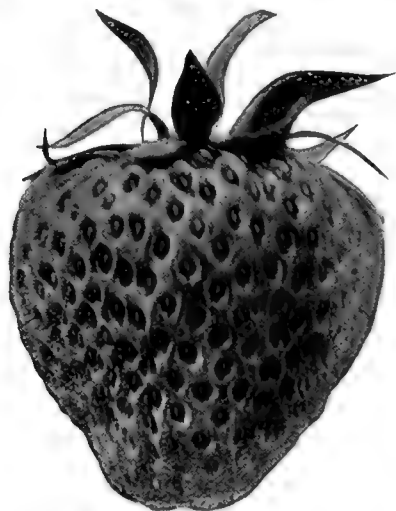


Brandywine, B. (Male.)

LATE. Bisexual. Has an unquestionable and splendid reputation. The berries are great big fellows, of deep blood red to the center, a flavor peculiar to itself and one of the best canning berries of all the late varieties. Just take a good look at the picture and see the beautiful form; there is very little variation; the one shown is a fair average. For this reason the first pickings never require any sorting. They have bright yellow seeds which are very prominent. The calyx also is very large. It is not only one of the largest and prettiest among the late varieties, but it is also one of the most productive. The fruit stems grow erect, holding their big berries well up from the ground. It is not choice about locality or grade of soil; seems to succeed everywhere, and its popularity increases each year. It is one of the pets among California growers, because they must ship their berries a long distance, and Brandywine always gets to the market in prime condition.

The foliage is very large, and an upright grower, having a dark green, leathery leaf, which is good protection for the bloom. A large percentage of the flowers open under the leaves, and are so completely hidden that it is difficult to see them without spreading the foliage. This one feature alone makes it a valuable variety to grow where there is danger of late frosts. The runners grow long before forming nodes, and we recommend plants to be set thirty-six inches apart in the row; let each mother plant make four more, layering them in a straight line so as to form the single hedge system. They do not require much manure; a very light dressing worked into the soil will give good results. Pack the berries in rows with stem ends down and it will not be necessary to sell them in competition with small berries; just name your own price. This makes the thirteenth year it has been selected in our breeding beds. Every plant is strong and well developed for heavy work.

Strawberries and How To Grow Them

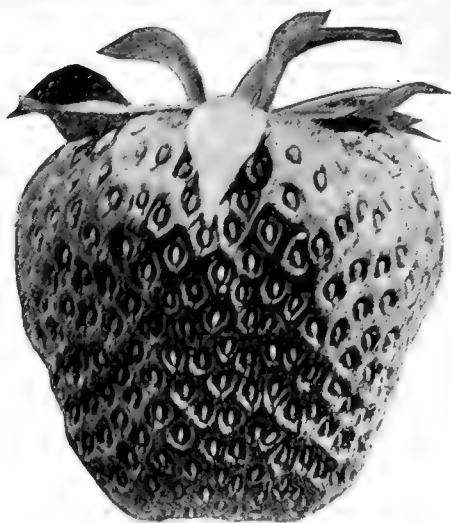


Arizona, B. (Male.) Everbearing.

MEDIUM EARLY. Bisexual. It really is difficult to know in just what season to place Arizona. This year it started to ripen its berries medium early and continued right through with the very latest varieties. Some people seem to get the wrong idea of everbearing strawberries, and we wish to explain their habits in such a way that everybody will understand it. Ordinarily an everbearing variety has a certain time to ripen its fruit during the regular strawberry season, but while this process of ripening is going on the vascular functions seem to possess the ability to appropriate part of the food in developing a new bud system, which continues to grow and will mature in the early fall, at which time they will again bloom, but not so profusely as in their regular season. If climatic conditions are favorable, the second crop will ripen about the latter part of September or first of October. There is a large demand for an everbearing variety of real merit, and we are watching Arizona with much interest; it comes the nearest to being an everbearing or double-cropper of any variety we ever have tested. However, if it only produced one crop, the Arizona is worthy of a place on every fruit farm and in every family garden on account of its productiveness, large size and deep red color. It is one of the kinds that will bear inspection before pricing, as it has a rich, aromatic, lasting flavor; or the term used by tea-tasters would be "a pleasing after-taste—inviting." The way everybody who visits our farm eats them convinces us that they have an inviting taste. At least, there is something about the Arizona patch that seems to hold them for a while. Of course, nothing suits us better than to see our visitors devour the big juicy fellows as fast as they can get them to their mouths; that is what they are grown for; the big sign says: "Eat all you want."

The foliage is a dark green, of medium size. An ever-bearing variety never builds up a large foliage; their vitality is largely contributed to bud and fruit forming. A little nitrate of soda will stimulate the vegetative parts and balance fruit and foliage up nicely. Grow it in double hedge rows, start cultivating immediately after the first crop is picked, and keep most of the runners off so the strength will be thrown to bud-forming. Pack with stem end down.

This is the fourth year for Arizona in our breeding bed, using mother plants which show the strongest everbearing habit.



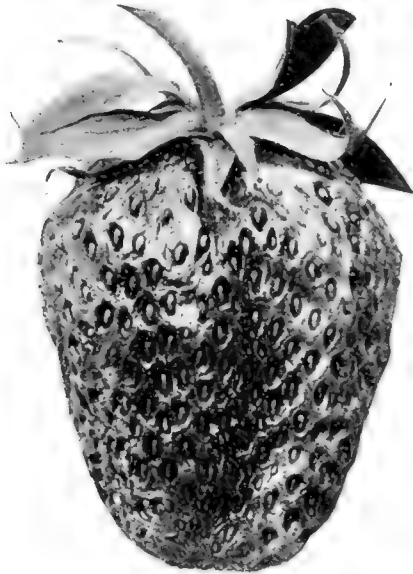
Marshall, B. (Male.)

LATE. Bisexual. Favored by everybody on account of its enormous size, blood red color and rich aromatic flavor, peculiar to itself. This is another of the good old stand-bys, for whose plants we never have been able to fill the demand. It is a winner at all exhibitions and has taken more first premiums at the Boston shows than any other variety. It is strictly a fancy berry and will take care of itself on the market. It does not produce so numerously as some others, but the immense size of the berries makes up in filling the quarts. The fancy grocers always are delighted to get them on account of the fruit being such a rich dark red with a gloss that is bound to attract the passers by. It is one of the richest strawberries grown; the juice is just like syrup and almost as sweet as it looks. The only fault we can find with the Marshall is that it does not last the whole year; but a few weeks of such sweetness is thankfully received. They are excellent canned and sun-preserved; therefore we have them the balance of the year. Their seeds are yellow as gold, and they sparkle as brightly. If its brilliant gloss and rich color could be shown in the photograph as perfectly as are its size and shape, the picture could then do it justice. It really was amusing to see how wishfully the photographer looked at it when arranging for its picture. Of course it isn't necessary to mention what became of the berry after the camera had performed its duty.

The grower who is catering for fancy trade will find Marshall a winner in every respect. People will pay almost any price after they once get a taste of them. A field of Marshalls in full fruit certainly is a sight worth while. The foliage is extra large, it is an upright grower, with leaves almost as round as a dollar; about one-half of them are light green, while the others are a very dark green, and the big red berries being evenly distributed all through the beautiful foliage make a gorgeous display of colors.

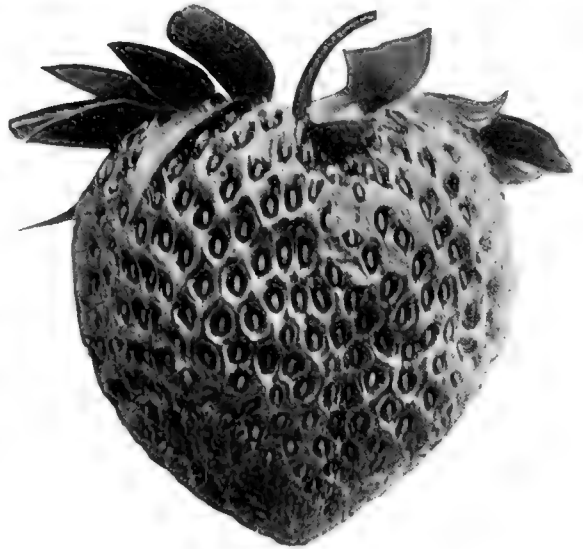
In order to obtain the very best results with this variety, set the plants not over twenty-four inches apart in the row and let them form a single hedge row; have your ground thoroughly enriched by working in plenty of manure, and when the berries are ready for market, place the top layer with stem ends down. No doubt about what purchasers will do. Remember, when you buy our Marshalls they come from a pure strain of plants that have been selected for twelve years.

R. M. Kellogg's Great Crop of



Parker Earle, B. (Male.)

LATE. Bisexual. Possesses a wonderful fruiting power, being recognized by the leading fruit growers as one of the most productive varieties under cultivation. The berries are of medium size, as shown in picture; their color is so bright a red that it gives a polished effect. The old saying that "beauty is only skin deep" will not hold good with Parker Earles, as their handsome color extends clear through, and as to flavor, we hardly dare tell the truth; they have a sort of "moreish" taste, that is, the more you eat the more you want. Their productiveness, lateness and firmness are what make them so popular with large growers. It is especially productive on rich low land, where it shines ahead of all others. Late blooming, with such large foliage, insures it from danger of frost. Parker Earle can be grown with much less work than most varieties, as it makes so few runners. It will produce larger berries and more of them if grown in hills or single hedge rows. For hills set the plants eighteen inches apart, but where the single hedge is preferable, thirty inches will be better; they stool up to such a mammoth size it is necessary to give each plant plenty of room to spread. It will be found an ideal variety to grow where mulching is scarce, as the berries are held well up from the ground; but where mulching can possibly be secured it will pay well to use it. The berries are too pretty to take any chances of getting sand on them. If they are to be grown on upland, pile on plenty of well-rotted manure, working it thoroughly into the soil, and be sure that your plants come from the propagating bed that is kept under close restriction, which will insure them strength and potency of pollen. The thoroughbred plants of our strain of Parker Earle are so perfectly balanced and thoroughly built up in their fruit producing organism that we have counted as high as three hundred and ninety berries on one plant, and the greater part of them fancy. This is the seventeenth year we have had it under careful selection and restriction, always making our selections from ideal ancestors.

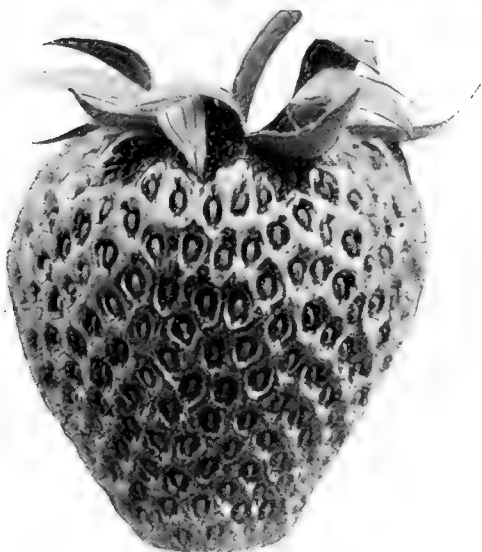


Gandy, B. (Male.)

LATE. Bisexual. One of the very largest and latest berries under cultivation. It is a beautiful bright red, with a smooth, shiny surface and glossy dark red seeds, which are quite prominent. There never was a berry introduced that will stand shipping better than Gandy. We have seen them after being shipped several hundred miles and they looked as fresh as if just picked from the vines. Their flavor also is hard to beat; the more one eats of them, the better they taste. In form and size there is little variation. The illustration shows an exact type. Just take a long look at it, and see what beautiful berries can be grown on our strain of thoroughbred plants. There are not many growers who haven't tried Gandy; it has a good reputation as a money-maker, ripening so late that it always brings the top prices, and when grown on thoroughbred plants, that are free from the least hint of exhaustion, it will be found as productive as any of the late varieties. It makes a very tall foliage of dark green, with a broad leathery leaf. Its fruit stems are long and hold the berries up above the foliage where the sun gets to them to put on the finishing touches. They remain on the vines for several days after thoroughly ripe. Three times each week is often enough to pick them, unless the weather be extremely hot. We have discovered that the first bloom which Gandy opens is deficient in pollen, and it will give double as many berries and much smoother fruit if every fourth row is set to some late bisexual like Aroma, Pride of Michigan, Dorman or Brandywine. Any of these will open their flowers in time to furnish plenty of strong pollen to give the required result. Set the plants thirty-six inches apart and let them form a narrow matted row; they make long runners and will not mat thickly if a little attention be given to layering them. If soil is moderately rich do not use any stable manure; 200 pounds of muriate of potash and 400 pounds bone meal, cultivated into the soil before plants are set, will give big returns. For a handsome package, just place the big fellows with stem ends down, and they will swell the purse of the grower.

This makes the twenty-first year we have had Gandy under our methods of selection. The most productive mother plants are the ones sought in this variety.

Strawberries and How To Grow Them

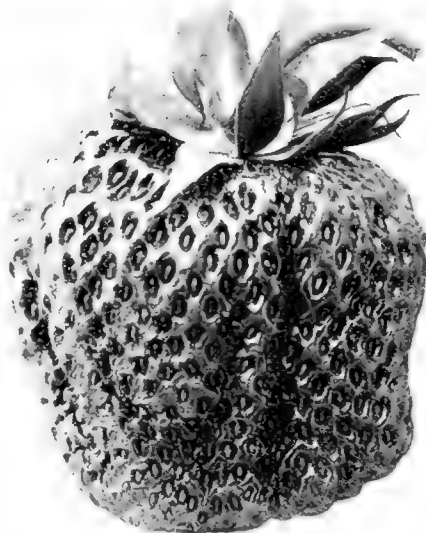


Sample, P. (Female.)

LATE. Pistillate. An extra large, bright red, top-shaped berry, the inner part being a deep scarlet; very rich and juicy; also highly flavored. The seeds turn red as the berry ripens and are so nearly the same color as the surface that it is difficult to see them, thus giving the berry a smooth, glossy appearance. The stem and calyx are small and remain a bright green for several days after the berry has been picked. Sample is not only one of the most beautiful berries among late varieties, but it is also one of the largest and most prolific; the berries lie in piles all along the rows, and are so uniform that it is not necessary to sort them until the latter part of its season. It is very seldom we see a berry ripen so evenly as does Sample; in this respect it seems to have a perfect system of coloring a certain percentage of its fruit each day until all the berries are gone; the bright red is evenly distributed all over the berry. It is a splendid shipper, excellent canner, and delicious for all table purposes; this is why it is so popular with commercial growers. It is a money-maker and truly may be called a mortgage-lifter; in fact, it is too good to be omitted by large or small growers or in the family garden. The foliage is a beautiful dark green, and an upright grower; the leaf stems are so long they seem to be reaching up to catch the sun's rays, spreading just a little to let the sun kiss the berries' cheeks into blushes. It has an extra large bloom for a pistillate, being so hardy that it is rarely damaged by frost. The double hedge system is the ideal way to grow Sample. Set plants thirty inches apart in the row, setting some good bisexual of the same season every fourth row. Pack the berries on stem end and customers will not argue about the price. Our records show that it has been under our methods of selection for ten years; it always has been one of our pets.



Not altogether what you do, but when and how you do it.



Bubach, P. (Female.)

LATE. Pistillate. They are great big meaty fellows with a bright red and waxy surface; some are cone shaped, while others are broad and thick. The one shown in the picture is an average specimen, both as to shape and size. The seeds are bright yellow and so prominent they fairly sparkle against the bright red surface. Its productiveness, mammoth size and handsome color make it a market commander, reputation winner and money getter. The inner part is meaty and very fine-grained for such a large berry, and the bright red color extends clear through. It has a large green calyx, with medium-sized stem. All these attractive features make it truly a handsome berry for fancy trade.

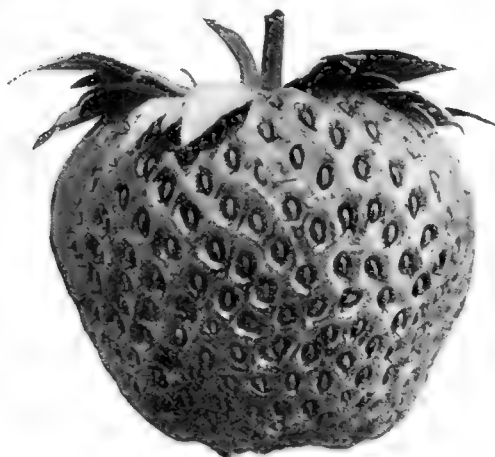
The foliage is a waxy dark green, with a spreading habit, very short fruit and leaf stems; it is an easy variety to control in the fruiting bed because it does not make many more runners than is necessary for a double hedge row, and this is the best way to grow this berry. On account of the runners being so short, we recommend that the plants be set twenty-four inches apart in the row; this will allow them to come together, and by layering runners zig-zag, a complete double hedge row is formed in time to give all the plants a good chance to build up big crowns and lots of fruit buds. We have tried Bubach on sandy loam, clay, and on black soil, and each test gave large results.

Place them nicely in the boxes so as to show their blushing cheeks, then name your own price. There is a world of pleasure in growing such fancy fruit; people always look upon such growers with admiration and tell others about your big berries until your name becomes a household word. This is the nineteenth year we have been selecting them in the breeding bed, and from the flattering reports received from our customers we are convinced that our strain of Bubachs is without an equal.



Close observance is the magic key to successful berry growing.

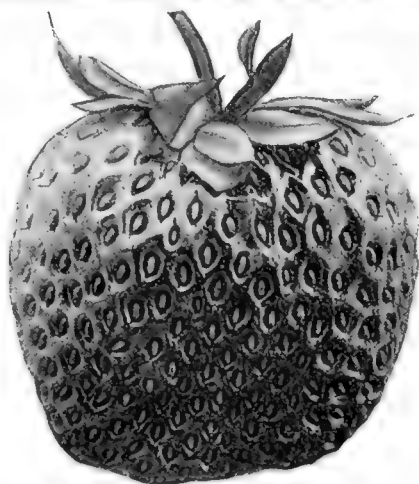
R. M. Kellogg's Great Crop of



Midnight, B. (Male.)

LATE. Bisexual. There is no other variety on the list quite like Midnight; it is a large pink berry, being broad and thick at stem end, tapering down to a flat point, somewhat wedge-shape. The flesh is almost white, having a texture pretty much the same as a white-meated peach. No one ever ate a richer or sweeter berry, just the kind to grow in family gardens, as it is one of the very latest and will prolong the season for this best of all fruit. It was called Midnight because its berries ripen at the last hour of the strawberry season. It is so productive that the foliage is unable to cover all the berries; they pile up along the rows and through the vines, until it is an effort for the leaves to get breathing room. It also is a good shipper, but we recommend it more highly for family gardens and to growers who sell from house to house than we do for distant markets. It must be tasted to appreciate its real value, as no one can pass them by after they once taste them. The foliage is a handsome, glossy, dark green, of a rather spreading nature; its crowns usually are large and lots of them; its lateness in blooming makes it almost immune from frost. As a pollenizer it is ideal, as the bloom is large and extra-rich in pollen. The plants of this variety are large and well developed. They should be set twenty-four inches apart on rich soil; layer the runners zig-zag, so as to form a double hedge row. Allow each mother plant to make four more; a larger number than this would crowd each other. When given plenty of room, each hill becomes very large and produces fruit in wonderful quantities. The berries will show up better if placed flat down with brightest side up; let customers taste before naming the price. After four years of testing and selecting it in our breeding bed, we are convinced that its merits justify us in recommending it to all lovers of extra-sweet strawberries. People who are not satisfied with such good things only in the day time should reserve a patch for Midnight.

If you want to be the leader on the strawberry market, do not put important work off until tomorrow; today is the best time to do things —just so it isn't Sunday.



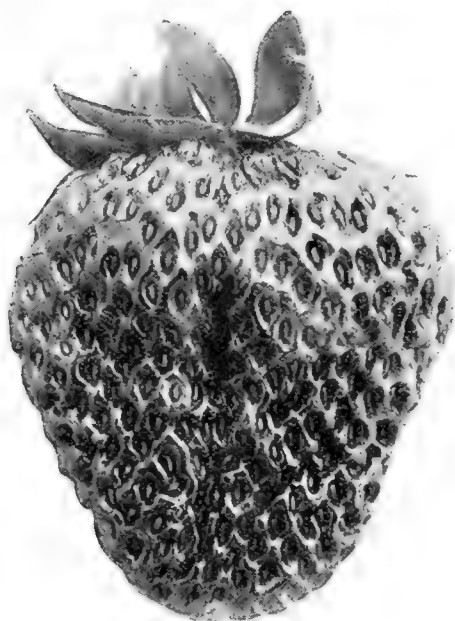
Rough Rider, B. (Male.)

LATE. Bisexual. The berries are medium large, of glossy crimson color, which extends through to center; quite juicy and rich. The surface is made glossy by the prominent yellow seed; for true shape see engraving, the camera can show this much better than we can describe it. There is but little variation, the one shown being a fair average. They are quite productive and always give a better crop the second year of fruiting than the first. Those who turn this variety under after harvesting the first crop have not seen Rough Rider do its best. The foliage is a dark green with a spreading habit; it easily is controlled in the fruiting bed on account of forming so few runners. Set the plants on rich soil, two feet apart and let them form the double hedge system, so they will have plenty of space to stool up, and you will get a big crop of high-quality berries that will ship to distant markets, and if packed nicely on stem ends, will bring a high price. Rough Rider has been carefully selected in the breeding bed for seven years. We have been unable to fill all the orders for our strain of plants as they have made a record wherever tested.



One of Our Specimen Quart-Box Labels

Strawberries and How To Grow Them



Dornan, B. (Male.)

LATE. Bisexual. An extra large berry; the picture shows the size and shape; it is dark red on one side, blending to a bright red on the other. The seeds are red and yellow. It is one of the meatiest and richest berries we ever have tasted; the inside is deep pink, shading almost to a white at center, the meat smooth as velvet and absolutely free from any gritty substance. Even the seeds are not noticeable; they seem to melt as the berry ripens. It has a large double calyx, and like the berry, it remains fresh and bright for days after being picked. Few varieties possess so many valuable points as Dornan. It is extra large, handsome in color, of a rich, delicate flavor, and, best of all, it is exceedingly productive. The big bright fellows lie in piles around the plants. It also is a splendid shipper and has a long season of ripening.

The foliage is dark green, of a waxy appearance; very large vigorous growing and of upright habit. The roots go down deep, bringing up plenty of moisture, which keeps everything moving. It has a large bloom and is a valuable pollinizer for late pistillates. The runners are short, and for this reason the plants should be set close together in the row (about every twenty-four inches), then layer the runners so as to form a single hedge row; this will give each hill plenty of room to spread their big foliage without shading the berries too much.

It is a pleasant experience to see a field of Dornans in full bloom; the beautiful white and yellow flowers dot the glossy foliage so thickly that it is almost hidden. Pack the beauties on their sides; it is a small job, as it only takes a very few to make the top layer of each quart box. Just let the customers taste them before you name the price, and they won't be objecting a few cents extra for such rich berries.

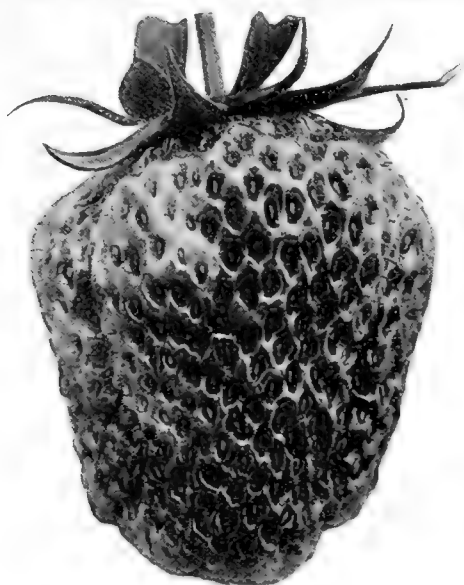
This is the seventh year of selection from ideal ancestors, and we are proud of the many points gained in so short a time. The demand for this strain of plants was too great for us last year, therefore we have increased the acreage for this season's trade, that we may be able to fill all orders for this excellent variety.



Pride of Michigan, B. (Male.)

MEDIUM TO LATE. Bisexual. This is a record breaker in every particular. The berries are wonderfully large, bright scarlet with blood-red cheeks; in fact, it is the largest, highest colored and richest flavored berry we ever have seen or tasted. They are very broad and thick at the stem, gradually tapering to cone shape; the seeds are deeply set and just as bright as can be made, which gives a polished effect. The inner part is made up of a very delicate, finely grained meat, which is a deep pink color, intermingled with dark-red streaks, making it one of the richest looking berries grown, and when it comes to judging its entire make-up for beauty, the olive-green calyx and stem come in for their full share of honors. No photographer or brush artist can do them justice; only nature may blend such delicate colors as appear in the Pride of Michigan, and it is quite as difficult to describe such an ideal berry with the pen as to paint it with the brush. To appreciate their real beauty they must be seen growing on the vines. Their foliage is the largest of any variety on the list; it grows upright and very tall, but spreads out wide to cover the big berries which lie in windrows, as the Pride is immensely productive. The fruit stems are extra long and heavy, holding the berries out to let the sun paint their cheeks, but the big broad leaves furnish shade to prevent the direct sun rays from striking them. The leaves are three and one-half by five inches, actual measurement and such a dark, glossy green, that they fairly shine. It also opens the largest and most bloom of any variety we ever have seen and is one of the richest of pollinizers for all late pistillates. Grow it in either single or double hedge rows; set plants twenty-four inches apart in the row, as it makes short runners. In packing the berries allow just a little of the olive-green calyx to show; it only takes five or six to make the top layer in a quart box. This is the fourth year we have been selecting and testing the Pride of Michigan in the breeding bed, and it has proved to be an ideal in every respect. A trial will convince anyone that this description does not tell one-half of its good points.

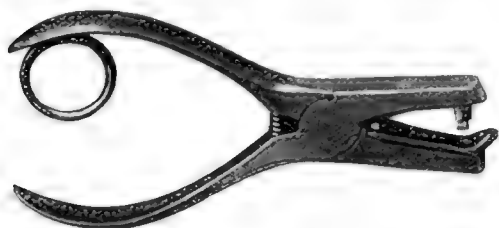
R.M. Kellogg's Great Crop of



Mark Hanna, P. (Female.)

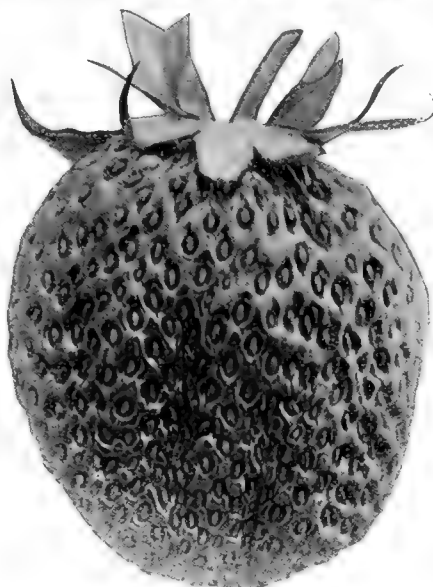
MEDIUM TO QUITE LATE. Pistillate. A large and most beautiful bright red berry with sparkling yellow seeds and light green calyx. The flesh is scarlet, solid and very rich. As a producer it certainly is a prize winner; the big berries are in clusters like cherries; for size and shape see photo illustration. We wish their brilliant color also could be shown, then everybody would agree with us that Mark Hanna is a handsome berry. It has a flavor peculiar to itself, somewhat on the cherry order. The foliage grows tall and droops over to each side of the row, spreading apart in the middle of the row, thus allowing the berries which grow in the center to color evenly, the same as those on the outer edge. They require no petting, but will give a big crop of fancy berries under ordinary conditions.

Set the plants thirty inches apart and allow them to form a double hedge row. When packing the berries for market, place the top layer of each quart on their sides, allowing part of their pretty green calyx to show. This is the third year of selection in our breeding bed, and it is rapidly gaining in all points and is one of our pets.



Nickel Plated Berry Ticket Punch

Every berry grower should have one of these punches. The number of quarts received from each picker is punched in their ticket, thus preventing mistakes and disputes. Price, each, 50 cents.



Oregon Iron Clad, B. (Male.)

VERY LATE. Bisexual. An extra large, broad-shaped berry, of a glossy dark red that extends through to the center. It has such a rich flavor that it is sure to become one of the most popular table berries of its season. Its productiveness and good shipping qualities are making it a very popular market variety wherever grown. It is a great favorite on the Pacific coast, and is exclusively grown in many localities there. The seeds are bright yellow and remain so, no matter how ripe the berry gets; it retains its brilliant color for days after being picked; the calyx also remains fresh and green and joins the berry in such a manner as to form a rather long neck, drooping over it in the form of a pointed collar. It makes a beautiful show when in full fruit. The foliage is extra large, light green and tall; the fruit stems are of more than ordinary length, holding their clusters of berries out in full view. They stand very erect until the fruit starts to ripen, then the weight gradually pulls them down until the berries are placed on the clean mulching; this makes picking an easy job. Selling the fruit is still easier, especially after buyers get a taste of them. When setting plants for fruit, put them nearly three feet apart in the row, and layer the runners so they will form the double hedge system, and you will be surprised how the berries will pile up on top of each other. Such big, broad fellows as these always show up best by placing the top layer of each quart box flatly on their sides; and don't forget to put the brightest cheek up; beauty is what catches the eye.

This makes the fourth year of selection, and it is making rapid gains in all points. You may safely give this variety a liberal trial; it is sure to please. Our strain of plants always has sold faster than we could grow them; this year the acreage has been doubled and the plants are finer than ever.

Do everything in the right way at the right time.

Strawberries and how To Grow Them



BASKETS AND BERRY BOXES

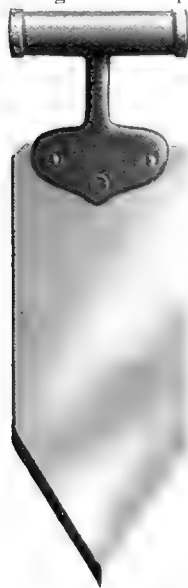
For many years past we have bought all our fruit packages of the **Wells-Higman Co., of St. Joseph, Mich.**, and knowing them to be among the most extensive and reliable manufacturers in their line we take pleasure in recommending them to any one who may be in need of **berry boxes or other shipping packages.** They also manufacture the American basket for shipping berries, and many prefer them to the Hallock boxes. Their goods are strictly first-class, and fruit growers who are not acquainted with this firm should correspond with them. They will mail their illustrated catalogue free on application.

They are headquarters for Grape, Peach, and Melon baskets, and have factories in the south as well as in Michigan.

OUR ALL-METAL DIBBLE

Price, 35c. 3 for \$1.00.

THE best tool in all the world for setting strawberry and vegetable plants. The handles are made from cored malleable castings and is a part of the cast malleable iron

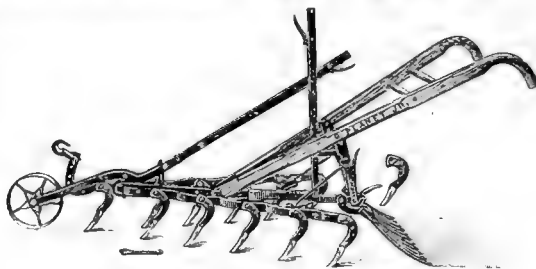


shank which is riveted to the blade with three rivets. The blade is made from No. 11 gauge, bright C. R. steel; it is ten inches long by four inches wide, and ground to an edge on lower bevels; it is twelve and one-half inches long from handle to point, and weighs nearly two pounds. Last year we set eighty acres and this year 100 acres of plants with them, and they are the most satisfactory tool ever used on our farms.

Last season the factory could not get them to us in time to fill all our orders, and we were obliged to return money for over

two thousand dibles. This year we have a stock of more than 10,000 on hand and the factory still making, and we guarantee to fill all orders that come to us; they can be sent with plants that go by freight or express, but cannot be sent by mail.

Remember you have our guarantee that these dibles are first-class in every respect, so you safely may include them in your order.



Planet, Jr., Twelve-Tooth Cultivator

THIS tool has rapidly grown in favor among strawberry growers, market gardeners, truckers and farmers. This is because the twelve chisel-shaped teeth do such thorough work, yet without throwing earth on small plants, and because the tool is so convenient, durable and strong. The combination of teeth and pulverizer leaves the ground in the finest condition. The pulverizer, used with the lever wheel, also enables the operator to set the tool exactly to any depth desired, making delicate work not only possible, but very easy. It is invaluable in narrow rows and fine work in market gardens, and close work on the farm. We have used these cultivators exclusively on our plant farms for years and could not afford to abandon them. They leave the soil perfectly level, which prevents any waste of moisture by capillary attraction.

We have sold hundreds of them and every one has given perfect satisfaction; they do not throw dirt or ridge it like most cultivators, but can be run so close to the row that very little hoeing is necessary, which cuts the expense down enough the first year to more than doubly pay the cost of the cultivator. It is an easy matter to keep a field of strawberry plants clean of weeds and the soil in a perfect dust mulch at a small expense, if the grower has the right kind of tools to work with.

We have one hundred acres of strawberry plants and only twenty men, averaging just five acres to each man, and we practice the most intensive cultural methods of any plant grower in the world. No weeds, no surface crust, no insects or fungi; nothing but pure, healthy strawberry plants. It is a matter of having the right kind of tools, and doing everything at the right time, in the right way.

The price of this valuable tool complete, is only \$8.50. We would not recommend it if we did not know that it was the best cultivator on earth for strawberries and garden truck. They can be shipped from Detroit, Mich.; Milwaukee, Wis.; Peoria, Ill.; Minneapolis, Minn.; Portland, Ore.; San Francisco, Cal., or Philadelphia, Penn.

PRICE LIST OF STRAWBERRY PLANTS.

Read carefully before making out your order.

When 500 or more plants of one variety are ordered, we give thousand rates on that variety; but we do not combine several varieties to make the number of plants 500 in order to give thousand rates. There are no discounts on the prices given, and all purchasers are treated alike. We leave nothing undone in order to grow the best plants possible, and the prices quoted are the lowest at which they can be furnished. When plants are to be sent by mail, add at the rate of 25 cents per hundred to the list prices given, and to Canada add at the rate of 50 cents per hundred. No orders accepted for less than one dollar. Not less than 25 of any variety sold, as fewer than that number is not sufficient for a fair test. Be very careful to get the prices right.

EXTRA EARLY VARIETIES

Varieties	25 Plants	50 Plants	100 Plants	200 Plants	300 Plants	400 Plants	500 Plants	1000 Plants
Excelsior (B)	\$0 25	\$0 35	\$0 55	\$0 85	\$1 10	\$1 30	\$1 50	\$3 00
August Luther (B)	25	40	65	1 00	1 35	1 60	1 75	3 50
Climax (B)	35	50	85	1 35	1 85	2 25	2 50	5 00
Michel's Early (B)	25	35	55	85	1 10	1 30	1 50	3 00
Texas (B)	35	50	85	1 35	1 85	2 25	2 50	5 00

EARLY VARIETIES

Bederwood (B)	25	35	55	85	1 10	1 30	1 50	3 00
Clyde (B)	30	45	70	1 10	1 50	1 80	2 00	4 00
Lovett (B)	25	40	65	1 00	1 35	1 60	1 75	3 50
Tennessee Prolific (B)	25	35	55	85	1 10	1 30	1 50	3 00
Wolverton (B)	25	40	65	1 00	1 35	1 60	1 75	3 50
Crescent (P)	25	35	55	85	1 10	1 30	1 50	3 00
Warfield (P)	25	35	55	85	1 10	1 30	1 50	3 00

MEDIUM VARIETIES

Lady Thompson (B)	25	40	65	1 00	1 35	1 60	1 75	3 50
Ridgeway (B)	30	45	70	1 10	1 50	1 80	2 00	4 00
Glenn Mary (B)	30	45	70	1 10	1 50	1 80	2 00	4 00
Wm. Belt (B)	25	40	65	1 00	1 35	1 60	1 75	3 50
Splendid (B)	25	40	65	1 00	1 35	1 60	1 75	3 50
Parson's Beauty (B)	30	45	70	1 10	1 50	1 80	2 00	4 00
Klondike (B)	30	45	70	1 10	1 50	1 80	2 00	4 00
Monitor (B)	30	45	70	1 10	1 50	1 80	2 00	4 00
Miller (B)	35	50	85	1 35	1 85	2 25	2 50	5 00
Nick Ohmer (B)	30	45	70	1 10	1 50	1 80	2 00	4 00
New York (B)	30	45	70	1 10	1 50	1 80	2 00	4 00

PRICE LIST OF STRAWBERRY PLANTS---Continued.

MEDIUM VARIETIES

Varieties	25 Plants	50 Plants	100 Plants	200 Plants	300 Plants	400 Plants	500 Plants	1000 Plants
Senator Dunlap (B)	30	45	70	1 10	1 50	1 80	2 00	4 00
Haverland (P)	25	40	65	1 00	1 35	1 60	1 75	3 50
Enormous (P)	30	45	70	1 10	1 50	1 80	2 00	4 00
Kansas (P)	30	45	70	1 10	1 50	1 80	2 00	4 00
Downing's Bride (P)	40	60	1 15	1 80	2 35	2 75	3 00	6 00
President (P)	50	85	1 25	2 10	2 85	3 50	4 00	8 00
Clark's Seedling (B)	50	85	1 25	2 10	2 85	3 50	4 00	8 00
Challenge (B)	40	60	1 15	1 80	2 35	2 75	3 00	6 00
Arizona Ever-Bearing (B) . . .	50	85	1 25	2 10	2 85	3 50	4 00	8 00

LATE VARIETIES

Aroma (B)	25	40	65	1 00	1 35	1 60	1 75	3 50
Pride of Michigan (B)	50	85	1 25	2 10	2 85	3 50	4 00	8 00
Brandywine (B)	25	40	65	1 00	1 35	1 60	1 75	3 50
Bismarck (B)	25	40	65	1 00	1 35	1 60	1 75	3 50
Gandy (B)	25	40	65	1 00	1 35	1 60	1 75	3 50
Dornan (B)	35	50	85	1 35	1 85	2 25	2 50	5 00
Marshall (B)	30	45	70	1 10	1 50	1 80	2 00	4 00
Parker Earle (B)	30	45	70	1 10	1 50	1 80	2 00	4 00
Rough Rider (B)	30	45	70	1 10	1 50	1 80	2 00	4 00
Bubach (P)	30	45	70	1 10	1 50	1 80	2 00	4 00
Sample (P)	30	45	70	1 10	1 50	1 80	2 00	4 00
New Home (B)	60	1 00	1 50	2 50	3 50	4 25	5 00	10 00
Oregon Iron Clad (B)	40	60	1 15	1 80	2 35	2 75	3 00	6 00
Midnight (B)	35	50	85	1 35	1 85	2 25	2 50	5 00
Mark Hanna (P)	40	60	1 15	1 80	2 35	2 75	3 00	6 00

PRICE LIST OF BERRY GROWER'S TOOLS

Twelve Tooth Cultivator, complete	\$ 9 00	Standard Box Stapling Machine	\$30 00
Rolling Runner Cutter and Leaf Guard	1 75	Advance Stapling Machine	25 00
Dibbles, 35 cents each, three for . . .	1 00	Berry Ticket Punch	50

These Tools can be shipped with plants when sent by express or freight.

BERRY GROWER'S STATIONERY

Berry Picker's Tally Tickets	250 for \$1 25	500 for \$1 75	1000 for \$2 50
Letter Heads	250 " 1 75	500 " 2 50	1000 " 3 75
Envelopes	250 " 1 25	500 " 1 75	1000 " 2 50

Page _____ No. _____

R. M. Kellogg Co., Three Rivers, Michigan. Reserve Copy of Your Order on this Sheet.

Do not tear out this leaf, but retain it for future reference.
We enclose a separate order sheet which should be used in sending in your order.

Name _____
(Very Plain)

Post Office _____ Rural Route No. _____

County _____ State _____

Name of town for _____ Ship by _____
Freight or Express (Say whether to be sent by freight, express or mail.)

Leave Vacant	No. of Plants	VARIETY	PRICE		Leave Vacant	No. of Plants	VARIETIES	PRICE	
			\$	Cts				\$	Cts
		EXTRA EARLY					MEDIUM		
		Excelsior (B)					Clark's Seedling (B)		
		August Luther (B)					Challenge (B)		
		Climax (B)					Arizona Ever-Bearing (B)		
		Michel's Early (B)					LATE		
		Texas (B)					Aroma (B)		
		EARLY					Pride of Michigan (B)		
		Bederwood (B)					Brandywine (B)		
		Clyde (B)					Bismarck (B)		
		Lovett (B)					Gandy (B)		
		Tennessee Prolific (B)					Dornan (B)		
		Wolverton (B)					Marshall (B)		
		Crescent (P)					Parker Earle (B)		
		Warfield (P)					Rough Rider (B)		
		MEDIUM					Bubach (P)		
		Lady Thompson (B)					Sample (P)		
		Ridgeway (B)					New Home (B)		
		Glenn Mary (B)					Oregon Iron Clad (B)		
		Wm. Belt (B)					Midnight (B)		
		Splendid (B)					Mark Hanna (P)		
		Parson's Beauty (B)					Twelve Tooth Cultivator		
		Klondike (B)					Rolling Runner Cutter		
		Monitor (B)					Dibbles,		
		Miller (B)					Box Stapling Machine		
		Nick Ohmer (B)					Berry Ticket Punch		
		New York (B)					Pickers' Tally Tickets		
		Senator Dunlap (B)					Letter Heads		
		Haverland (P)					Envelopes		
		Enormous (P)					Amount in first column		
		Kansas (P)					Total amount sent - -		
		Downing's Bride (P)					Balance Due - - - -		
		President (P)							
		Total first column							

Notice to Patrons

The plants herein offered are propagated from **Pure Pedigree Plants** and ideal plants, as explained in the chapter on "Improvement of Plants." We are confident they are the only plants obtainable propagated in this manner, and that their fruiting vigor cannot be equalled. While we practice the highest cultivation we know how to give, we have demonstrated that the vigor of our plants has been the basis of our success. By all means start a propagating bed this season.

ORDERS MUST AMOUNT TO ONE DOLLAR

The correspondence, postage, booking and filling orders for less than that amount is done at a loss.

TAKING UP STRAWBERRY PLANTS

The whole row of plants is taken up, and all those poorly rooted are thrown out. The fork used for this purpose is so constructed that plants are not bruised or roots broken off. All dead leaves and stems are picked off and roots straightened by such a system that from the time they leave the ground until they are ready for shipment they are not exposed a half minute all together.

SUBSTITUTION

We desire to furnish each customer exactly what he orders, but sometimes find the variety all sold before his order is reached, all orders being filed in the rotation in which they are received. If no substitution is permitted, we are obliged to disappoint the customer by returning the money. There are several varieties in the same season and of equal value, and if we are out of the variety ordered and substitution is permitted, we will add ten per cent to the plants substituted. Unless you expressly state "**no substitution**," we will understand you desire your order filled as above stated. There is very little danger of not getting the varieties desired, if orders are sent in early.

PRICE OF PLANTS

The prices quoted are net, and the lowest at which they can be grown and placed on the market. This list abrogates all former price lists. No charge will be made for packing, crates or boxes, and delivery to forwarders. No plants sold for fall planting. Not less than 25 strawberry plants of any variety will be sold; it requires that number for a fair trial.

NO AGENTS

We employ no agents. Scores of complaints come to us every year saying, "The plants I bought of your agents are worthless." Tree peddlers secure copies of this book and represent themselves as our agents, and then deliver common stock, to the loss and disgust of purchasers. You can only get the genuine thoroughbred plants by sending direct to us. Strawberry plants will not endure the exposure of handling with trees and other plants in delivering orders and carrying around the country after the packages are opened.

MAKE UP A CLUB

You can join with your neighbors in getting up a club and get the benefit of thousand rates on all varieties of which five hundred or more of each kind are ordered. The club order must be shipped to one address. Each bundle of 25 plants being labeled, the division is easily made. Catalogues will be sent to any of your neighbors on request, to aid in making up the club.

TERMS

Strictly cash with order. No orders are booked unless one-third the amount is remitted and balance before shipment.

ORDER EARLY

All orders are filed in the rotation in which they are received, hence the earlier they are sent in, the better.

HOW TO REMIT

Send money by postoffice order, bank draft, express order, or registered letter. We cannot be responsible for money sent loose in a letter. When private checks are sent, add fifteen cents to cover the cost of collection.

REFERENCES

All banks, wholesale houses and manufacturers use the Commercial Reports of R. G. Dunn and Bradstreet, and you can see them by request. These reports place our capital at \$35,000.00 and credit rating the highest given by any one on that amount of capital.

Special references: First National Bank, of Three Rivers, or any merchant in this city.

PLANTS BY MAIL

When plants are to be sent by mail, add at the rate of 25 cents per hundred to the list price given; and to Canada at the rate of 50 cents per hundred.

The plants are packed in moss and go perfectly safe, arriving in perfect condition. We send plants by mail only at prices given for twenty-five, fifty and one hundred and not at thousand rates.

EXPRESS RATES

Express charges are 20 per cent less than for general merchandise to any part of the country. All small orders are generally cheaper by express than freight, as only pound rates are charged, while railroads charge for one hundred pounds without regard to weight when sent by freight.

FREIGHT

Our railroad connections are first-class. Plants leaving here at six o'clock in the evening arrive in Chicago, Toledo and Detroit the same night, and from these points they go in through freights to all principal cities and intermediate points. It is seldom they fail to arrive on time, but sometimes delays occur, and when notified they are behind time, we hurry them forward by telegraphic tracers. We advise purchasers to consult local freight agents as to time and give the route over which you wish them sent by freight. If no shipping directions are given, we exercise our best judgment without assuming any responsibility.

GUARANTEE OF GENUINENESS

The plants being propagated in special beds and labeled when taken up, would seem to preclude the possibility of mistakes, and we guarantee plants to be true to label, with express understanding that if a mistake happens we are not to be held for any damages beyond the amount received for the plants.

GUARANTEEING RESULTS

We send plants to the most distant states, with entire success, to anybody and everybody who orders them. We are exceedingly anxious that they shall meet their highest expectations, and to this end will do all in our power to contribute success. But after they are delivered to express companies or railroads, they belong to the purchasers and we have no control over them. We do not know what treatment they are to receive, hence you can readily see why we cannot, and do not, guarantee any results whatever. Our responsibility ceases when delivered to express or railroad.

CLAIMS

All claims must be made within five days of the receipt of plants, when they will be investigated and if not found correct will be promptly adjusted.

ORDERS ARE ACKNOWLEDGED

As soon as received. If you do not hear from us after a reasonable time, write again.

Notice

This Booklet is revised every year, and sent out free to all who are interested in strawberry growing. Do not loan it but keep it for reference. If you want one sent to a friend, send his address on a postal card, and we will mail it with your compliments, so he will know who sent it. Our object is to place fruit growers in possession of such facts concerning plant life and the laws which govern the development of fruit as will enable them to succeed. Our success depends upon your success. The number of copies one person can order is limited to four.

